



CALL NO. 107

CONTRACT ID. 204117

ROWAN COUNTY

FED/STATE PROJECT NUMBER HSIP 5211 (118)

DESCRIPTION US HIGHWAY 60 (US 60)

WORK TYPE ASPHALT SURFACE WITH GRADE & DRAIN

PRIMARY COMPLETION DATE 9/30/2021

LETTING DATE: September 25,2020

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 am EASTERN DAYLIGHT TIME September 25,2020. Bids will be publicly announced at 10:00 am EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

DBE CERTIFICATION REQUIRED - 18%

REQUIRED BID PROPOSAL GUARANTY: Not less than 5% of the total bid.

TABLE OF CONTENTS

PART I	SCOPE OF WORK <ul style="list-style-type: none">• PROJECT(S), COMPLETION DATE(S), & LIQUIDATED DAMAGES• CONTRACT NOTES• FEDERAL CONTRACT NOTES• NATIONAL HIGHWAY• ASPHALT MIXTURE• DGA BASE• DGA BASE FOR SHOULDERS• FUEL AND ASPHALT PAY ADJUSTMENT• COMPACTION OPTION B• HOLD AWARD• SPECIAL NOTE(S) APPLICABLE TO PROJECT• LIQUIDATED DAMAGES• WASTE AND BORROW SITES• COORDINATION OF WORK WITH OTHER CONTRACTS• DOUBLE ASPHALT SEAL COAT• EDGE KEY (BY TON)• GUARDRAIL• ASPHALT MILLING AND TEXTURING• TYPICAL SECTION DIMENSIONS• TRAFFIC CONTROL PLAN• DURABLE PAVEMENT EDGE DETAILS• RIGHT OF WAY CERTIFICATION• UTILITY IMPACT & RAIL CERTIFICATION NOTES• KPDES STORM WATER PERMIT, BMP AND ENOI• SKETCH MAP(S)• SUMMARY SHEET(S)• TYPICAL SECTION(S)• DETAIL SHEET(S)• DETAIL SHEETS FOR SLIDE REPAIR• GUARDRAIL DELIVERY VERIFICATION SHEET• BRIDGE DETAIL FOR PAVING PROJECT• SAFETY TYPE BOX INLET• DOUBLE SAFETY TYPE BOX INLET
PART II	SPECIFICATIONS AND STANDARD DRAWINGS <ul style="list-style-type: none">• SPECIFICATIONS REFERENCE• SUPPLEMENTAL SPECIFICATION• [SN-11M] BARCODE LABEL ON PERMANENT SIGNS• STANDARD DRAWINGS THAT APPLY
PART III	EMPLOYMENT, WAGE AND RECORD REQUIREMENTS <ul style="list-style-type: none">• FEDERAL-AID CONSTRUCTION CONTRACTS - FHWA 1273• NONDISCRIMINATION OF EMPLOYEES• EXECUTIVE BRANCH CODE OF ETHICS• PROJECT WAGE RATES LOCALITY 3 / FEDERAL• NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EEO ROWAN
PART IV	INSURANCE

PART V BID ITEMS

PART I
SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 09

CONTRACT ID - 204117

HSIP 5211 (118)

COUNTY - ROWAN

PCN - 0910300602001

HSIP 5211 (118)

US HIGHWAY 60 (US 60) (MP 10.834) FROM BRAMBLEWOOD LANE EXTENDING EAST TO THE ROWAN/CARTER COUNTY LINE (MP 17.112) SYP NO. 09-09008.00.

GEOGRAPHIC COORDINATES LATITUDE 38:14:20.20 LONGITUDE -83:21:15.30

COMPLETION DATE(S):

COMPLETED BY 09/30/2021

APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

PROPOSAL ADDENDA

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

BID SUBMITTAL

Bidder must use the Department's electronic bidding software. The Bidder must download the bid file located on the Bid Express website (www.bidx.com) to prepare a bid packet for submission to the Department. The bidder must submit electronically using Bid Express.

JOINT VENTURE BIDDING

Joint venture bidding is permissible. All companies in the joint venture must be prequalified in one of the work types in the Qualifications for Bidders for the project. The bidders must get a vendor ID for the joint venture from the Division of Construction Procurement and register the joint venture as a bidder on the project. Also, the joint venture must obtain a digital ID from Bid Express to submit a bid. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

UNDERGROUND FACILITY DAMAGE PROTECTION

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. When prescribed in said directives, the contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom shall be contacted through their individual Protection Notification Center. Non-compliance with these directives can result in the enforcement of penalties.

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

Pursuant to KRS 176.085(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by [KRS 14A.9-010](#) to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under [KRS 14A.9-030](#) unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. If the foreign entity is not required to obtain a certificate as provided in [KRS 14A.9-010](#), the foreign entity should identify the applicable exception. Foreign entity is defined within [KRS 14A.1-070](#).

For all foreign entities required to obtain a certificate of authority to transact business in the Commonwealth, if a copy of the certificate is not received by the contracting agency within the time frame identified above, the foreign entity's solicitation response shall be deemed non-responsive or the awarded contract shall be cancelled.

Businesses can register with the Secretary of State at <https://secure.kentucky.gov/sos/ftbr/welcome.aspx>.

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by fax (502) 564-7299 or email to kytc.projectquestions@ky.gov. The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

The deadline for posting answers will be 3:00 pm Eastern Daylight Time, the day preceding the Letting. Questions may be submitted until this deadline with the understanding that the later a question is submitted, the less likely an answer will be able to be provided.

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website (www.transportation.ky.gov/contract). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

HARDWOOD REMOVAL RESTRICTIONS

The US Department of Agriculture has imposed a quarantine in Kentucky and several surrounding states, to prevent the spread of an invasive insect, the emerald ash borer. Hardwood cut in conjunction with the project may not be removed from the state. Chipping or burning on site is the preferred method of disposal.

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

Identification of excess material sites and borrow sites shall be the responsibility of the Contractor. The Contractor shall be responsible for compliance with all applicable state and federal laws and may wish to consult with the US Fish and Wildlife Service to seek protection under Section 10 of the Endangered Species Act for these activities.

ACCESS TO RECORDS

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially

disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004.

April 30, 2018

FEDERAL CONTRACT NOTES

The Kentucky Department of Highways, in accordance with the Regulations of the United States Department of Transportation 23 CFR 635.112 (h), hereby notifies all bidders that failure by a bidder to comply with all applicable sections of the current Kentucky Standard Specifications, including, but not limited to the following, may result in a bid not being considered responsive and thus not eligible to be considered for award:

- | | |
|--------------------------------|--|
| 102.02 Current Rating | 102.08 Preparation and Delivery of Proposals |
| 102.13 Irregular Bid Proposals | 102.14 Disqualification of Bidders |
| 102.09 Proposal Guaranty | |

CIVIL RIGHTS ACT OF 1964

The Kentucky Department of Highways, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252) and the Regulations of the Federal Department of Transportation (49 C.F.R., Part 21), issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the ground of race, color, or national origin.

NOTICE TO ALL BIDDERS

To report bid rigging activities call: 1-800-424-9071.

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

SECOND TIER SUBCONTRACTS

Second Tier subcontracts on federally assisted projects shall be permitted. However, in the case of DBE's, second tier subcontracts will only be permitted where the other subcontractor is also a DBE. All second tier subcontracts shall have the consent of both the Contractor and the Engineer.

DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

It is the policy of the Kentucky Transportation Cabinet (“the Cabinet”) that Disadvantaged Business Enterprises (“DBE”) shall have the opportunity to participate in the performance of highway construction projects financed in whole or in part by Federal Funds in order to create a level playing field for all businesses who wish to contract with the Cabinet. To that end, the Cabinet will comply with the regulations found in 49 CFR Part 26, and the definitions and requirements contained therein shall be adopted as if set out verbatim herein.

The Cabinet, contractors, subcontractors, and sub-recipients shall not discriminate on the basis of race, color, national origin, or sex in the performance of work performed pursuant to Cabinet contracts. The contractor shall carry out applicable requirements of 49 CFR 26 in the award and administration of federally assisted highway construction projects. The contractor will include this provision in all its subcontracts and supply agreements pertaining to contracts with the Cabinet.

Failure by the contractor to carry out these requirements is a material breach of its contract with the Cabinet, which may result in the termination of the contract or such other remedy as the Cabinet deems necessary.

DBE GOAL

The Disadvantaged Business Enterprise (DBE) goal established for this contract, as listed on the front page of the proposal, is the percentage of the total value of the contract.

The contractor shall exercise all necessary and reasonable steps to ensure that Disadvantaged Business Enterprises participate in a least the percent of the contract as set forth above as goals for this contract.

OBLIGATION OF CONTRACTORS

Each contractor prequalified to perform work on Cabinet projects shall designate and make known to the Cabinet a liaison officer who is assigned the responsibility of effectively administering and promoting an active program for utilization of DBEs.

If a formal goal has not been designated for the contract, all contractors are encouraged to consider DBEs for subcontract work as well as for the supply of material and services needed to perform this work.

Contractors are encouraged to use the services of banks owned and controlled by minorities and women.

CERTIFICATION OF CONTRACT GOAL

Contractors shall include the following certification in bids for projects for which a DBE goal has been established. BIDS SUBMITTED WHICH DO NOT INCLUDE CERTIFICATION OF DBE PARTICIPATION WILL NOT BE ACCEPTED. These bids will not be considered for award by the Cabinet and they will be returned to the bidder.

“The bidder certifies that it has secured participation by Disadvantaged Business Enterprises (“DBE”) in the amount of _____ percent of the total value of this contract and that the DBE participation is in compliance with the requirements of 49 CFR 26 and the policies of the Kentucky Transportation Cabinet pertaining to the DBE Program.”

The certification statement is located in the electronic bid file. All contractors must certify their DBE participation on that page. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted.

DBE PARTICIPATION PLAN

Lowest responsive bidders must submit the *DBE Plan/ Subcontractor Request*, form TC 14-35 DBE, within **5** days of the letting. This is necessary before the Awards Committee will review and make a recommendation. **The project will not be considered for award prior to submission and approval of the apparent low bidder’s DBE Plan/Subcontractor Request.**

The DBE Participation Plan shall include the following:

1. Name and address of DBE Subcontractor(s) and/or supplier(s) intended to be used in the proposed project;
2. Description of the work each is to perform including the work item, unit, quantity, unit price and total amount of the work to be performed by the individual DBE. The Proposal Line Number, Category Number, and the Project Line Number can be found in the “material listing” on the Construction Procurement website under the specific letting;
3. The dollar value of each proposed DBE subcontract and the percentage of total project contract value this represents. DBE participation may be counted as follows:
 - a. If DBE suppliers and manufactures assume actual and contractual responsibility, the dollar value of materials to be furnished will be counted toward the goal as follows:
 - The entire expenditure paid to a DBE manufacturer;
 - 60 percent of expenditures to DBE suppliers that are not manufacturers provided the supplier is a regular dealer in the product involved. A regular dealer must be engaged in, as its principal business and in its own name, the sale of products to the public, maintain an inventory and own and operate distribution equipment; and
 - The amount of fees or commissions charged by the DBE firms for a bona fide service, such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, supplies, delivery of materials and supplies or for furnishing bonds, or insurance, providing such fees or commissions are determined to be reasonable and customary.

- b) The dollar value of services provided by DBEs such as quality control testing, equipment repair and maintenance, engineering, staking, etc.;
 - c) The dollar value of joint ventures. DBE credit for joint ventures will be limited to the dollar amount of the work actually performed by the DBE in the joint venture;
4. Written and signed documentation of the bidder's commitment to use a DBE contractor whose participation is being utilized to meet the DBE goal; and
 5. Written and signed confirmation from the DBE that it is participating in the contract as provided in the prime contractor's commitment.

UPON AWARD AND BEFORE A WORK ORDER WILL BE ISSUED

Contractors must submit the signed subcontract between the contractor and the DBE contractor, along with the DBE's certificate of insurance. If the DBE is a supplier of materials for the project, a signed purchase order must be submitted to the Division of Construction Procurement.

Changes to DBE Participation Plans must be approved by the Cabinet. The Cabinet may consider extenuating circumstances including, but not limited to, changes in the nature or scope of the project, the inability or unwillingness of a DBE to perform the work in accordance with the bid, and/or other circumstances beyond the control of the prime contractor.

CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS

If the DBE participation submitted in the bid by the apparent lowest responsive bidder does not meet or exceed the DBE contract goal, the apparent lowest responsive bidder must submit a Good Faith Effort Package to satisfy the Cabinet that sufficient good faith efforts were made to meet the contract goals prior to submission of the bid. Efforts to increase the goal after bid submission will not be considered in justifying the good faith effort, unless the contractor can show that the proposed DBE was solicited prior to the letting date. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted. One complete set (hard copy along with an electronic copy) of this information must be received in the Division of Contract Procurement no later than 12:00 noon of the tenth calendar day after receipt of notification that they are the apparent low bidder.

Where the information submitted includes repetitious solicitation letters it will be acceptable to submit a sample representative letter along with a distribution list of the firms solicited. Documentation of DBE quotations shall be a part of the good faith effort submittal as necessary to demonstrate compliance with the factors listed below which the Cabinet considers in judging good faith efforts. This documentation may include written subcontractors' quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

The Good Faith Effort Package shall include, but may not be limited to information showing evidence of the following:

1. Whether the bidder attended any pre-bid meetings that were scheduled by the Cabinet to inform DBEs of subcontracting opportunities;
2. Whether the bidder provided solicitations through all reasonable and available means;
3. Whether the bidder provided written notice to all DBEs listed in the DBE directory at the time of the letting who are prequalified in the areas of work that the bidder will be subcontracting;
4. Whether the bidder followed up initial solicitations of interest by contacting DBEs to determine with certainty whether they were interested. If a reasonable amount of DBEs within the targeted districts do not provide an intent to quote or no DBEs are prequalified in the subcontracted areas, the bidder must notify the Disadvantaged Enterprise Business Liaison Officer (DEBLO) in the Office of Civil Rights and Small Business Development to give notification of the bidder's inability to get DBE quotes;
5. Whether the bidder selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise perform these work items with its own forces;
6. Whether the bidder provided interested DBEs with adequate and timely information about the plans, specifications, and requirements of the contract;
7. Whether the bidder negotiated in good faith with interested DBEs not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached;
8. Whether quotations were received from interested DBE firms but were rejected as unacceptable without sound reasons why the quotations were considered unacceptable. The fact that the DBE firm's quotation for the work is not the lowest quotation received will not in itself be considered as a sound reason for rejecting the quotation as unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a DBE quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy DBE goals;
9. Whether the bidder specifically negotiated with subcontractors to assume part of the responsibility to meet the contract DBE goal when the work to be subcontracted includes potential DBE participation;
10. Whether the bidder made any efforts and/or offered assistance to interested DBEs in obtaining the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal; and
11. Any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include DBE participation.

FAILURE TO MEET GOOD FAITH REQUIREMENT

Where the apparent lowest responsive bidder fails to submit sufficient participation by DBE firms to meet the contract goal and upon a determination by the Good Faith Committee based upon the information submitted that the apparent lowest responsive bidder failed to make sufficient reasonable efforts to meet the contract goal, the bidder will be offered the opportunity to meet in person for administrative reconsideration. The bidder will be notified of the Committee's decision within 24 hours of its decision. The bidder will have 24 hours to request reconsideration of the Committee's decision. The reconsideration meeting will be held within two days of the receipt of a request by the bidder for reconsideration.

The request for reconsideration will be heard by the Office of the Secretary. The bidder will have the opportunity to present written documentation or argument concerning the issue of whether it met the goal or made an adequate good faith effort. The bidder will receive a written decision on the reconsideration explaining the basis for the finding that the bidder did or did not meet the goal or made adequate Good Faith efforts to do so.

The result of the reconsideration process is not administratively appealable to the Cabinet or to the United States Department of Transportation.

The Cabinet reserves the right to award the contract to the next lowest responsive bidder or to rebid the contract in the event that the contract is not awarded to the low bidder as the result of a failure to meet the good faith requirement.

SANCTIONS FOR FAILURE TO MEET DBE REQUIREMENTS OF THE PROJECT

Failure by the prime contractor to fulfill the DBE requirements of a project under contract or to demonstrate good faith efforts to meet the goal constitutes a breach of contract. When this occurs, the Cabinet will hold the prime contractor accountable, as would be the case with all other contract provisions. Therefore, the contractor's failure to carry out the DBE contract requirements shall constitute a breach of contract and as such the Cabinet reserves the right to exercise all administrative remedies at its disposal including, but not limited to the following:

- Disallow credit toward the DBE goal;
- Withholding progress payments;
- Withholding payment to the prime in an amount equal to the unmet portion of the contract goal; and/or
- Termination of the contract.

PROMPT PAYMENT

The prime contractor will be required to pay the DBE within seven (7) working days after he or she has received payment from the Kentucky Transportation Cabinet for work performed or materials furnished.

CONTRACTOR REPORTING

All contractors must keep detailed records and provide reports to the Cabinet on their progress in meeting the DBE requirement on any highway contract. These records may include, but shall not be limited to payroll, lease agreements, cancelled payroll checks, executed subcontracting agreements, etc. Prime contractors will be required to complete and submit a **signed and notarized** Affidavit of Subcontractor Payment (TC 18-7) and copies of checks for any monies paid to each DBE subcontractor or supplier utilized to meet a DBE goal. These documents must be completed and signed within 7 days of being paid by the Cabinet.

Payment information that needs to be reported includes date the payment is sent to the DBE, check number, Contract ID, amount of payment and the check date. Before Final Payment is made on this contract, the Prime Contractor will certify that all payments were made to the DBE subcontractor and/or DBE suppliers.

******* IMPORTANT *******

Please mail the original, signed and completed TC (18-7) Affidavit of Subcontractor Payment form and all copies of checks for payments listed above to the following address:

Office of Civil Rights and Small Business Development
6th Floor West 200 Mero Street
Frankfort, KY 40622

The prime contractor should notify the KYTC Office of Civil Rights and Small Business Development seven (7) days prior to DBE contractors commencing work on the project. The contact in this office is Mr. Melvin Bynes. Mr. Bynes' current contact information is email address – melvin.bynes2@ky.gov and the telephone number is (502) 564-3601.

DEFAULT OR DECERTIFICATION OF THE DBE

If the DBE subcontractor or supplier is decertified or defaults in the performance of its work, and the overall goal cannot be credited for the uncompleted work, the prime contractor may utilize a substitute DBE or elect to fulfill the DBE goal with another DBE on a different work item. If after exerting good faith effort in accordance with the Cabinet's Good Faith Effort policies and procedures, the prime contractor is unable to replace the DBE, then the unmet portion of the goal may be waived at the discretion of the Cabinet.

PROHIBITION ON TELECOMMUNICATIONS EQUIPMENT OR SERVICES

In accordance with the FY 2019 National Defense Authorization Act (NDAA), 2 CFR 200.216, and 2 CFR 200.471, Federal agencies are prohibited, after August 13, 2020, from obligating or expending financial assistance to obtain certain telecommunications and video surveillance services and equipment from specific producers. As a result of these regulations, contractors and subcontractors are prohibited, on projects with federal funding participation, from providing telecommunication or video surveillance equipment, services, or systems produced by:

- Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities)
- Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities)

LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC – CARGO PREFERENCE ACT (CPA).

(REV 12-17-15) (1-16)

SECTION 7 is expanded by the following new Article:

102.10 **Cargo Preference Act – Use of United States-flag vessels.**

Pursuant to Title 46CFR Part 381, the Contractor agrees

- To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

- To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph 1 of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

- To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

NATIONAL HIGHWAY

Be advised this project is on the NATIONAL HIGHWAY SYSTEM.

ASPHALT MIXTURE

Unless otherwise noted, the Department estimates the rate of application for all asphalt mixtures to be 110 lbs/sy per inch of depth.

DGA BASE

Unless otherwise noted, the Department estimates the rate of application for DGA Base to be 115 lbs/sy per inch of depth.

DGA BASE FOR SHOULDERS

Unless otherwise noted, the Department estimates the rate of application for DGA Base for Shoulders to be 115 lbs/sy per inch of depth. The Department will not measure necessary grading and/or shaping of existing shoulders prior to placing of DGA Base, but shall be incidental to the Contract unit price per ton for DGA Base.

Accept payment at the Contract unit price per ton as full compensation for all labor, materials, equipment, and incidentals for grading and/or shaping of existing shoulders and furnishing, placing, and compacting the DGA Base.

FUEL AND ASPHALT PAY ADJUSTMENT

The Department has included the Contract items Asphalt Adjustment and Fuel Adjustment for possible future payments at an established Contract unit price of \$1.00. The Department will calculate actual adjustment quantities after work is completed. If existing Contract amount is insufficient to pay all items on the contract with the adjustments, the Department will establish additional monies with a change order.

OPTION B

Be advised that the Department will control and accept compaction of asphalt mixtures furnished on this project under OPTION B in accordance with Sections 402 and 403.

SPECIAL NOTE FOR AWARD OF CONTRACT

In accordance to section 103.02 of the Standard Specifications for Road and Bridge Construction, the Department may hold and not award the contract for a period not to exceed sixty (60) calendar days from the date of letting.

Special Notes Applicable to Project – General Notes & Description of Work

CAUTION

The information in this proposal and the type of work listed herein are approximate only and are not to be taken as an exact evaluation of the materials and conditions to be encountered during construction; the bidder must draw his/her own conclusions when developing the Unit Bid Prices for each bid item. As such, if the conditions encountered are not in accordance with the information shown, the Department does not guarantee any changes to the Unit Bid Prices nor extension of the contract will be considered. The Department will pay for bid item quantity overruns, but only if pre-approved by the Engineer.

STATIONING

The contractor is advised that the planned locations of work were established from a beginning station number which is STA 572+03.52 at the intersection of US 60 and Bramblewood Road. Milepoints were established from a beginning Milepoint which is MP 10.834 at the intersection of US 60 and Bramblewood Road. The existing mile marker signs may not correspond to the proposed work locations.

LIDAR

All survey information was obtained from available KYTC Aerial and Mobile LIDAR data and should be field verified as appropriate during construction and prior to incorporating the various project work items. Refer to the Special Note for Staking concerning staking operations required to control and construct the work.

ON-SITE INSPECTION

Before submitting a bid for the work, make a thorough inspection of the site and determine existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid to be evidence of this inspection having been made. The Department will not honor any claims for money or time extension resulting from site conditions.

RIGHT OF WAY LIMITS

The Department has not established the exact limits of the Right-of-Way. Unless a consent and release form is obtained from the adjoining property owner, limit work activities to the obvious Right-of-Way and staging areas secured by the Contractor at no additional cost to the Department. In the event that private improvements (i.e. fences, buildings, etc.) encroach upon the Right-of-Way, the contractor shall notify the Engineer and limit work activities in order to NOT disturb the improvements. If they become necessary, the Department will secure consent and releases from property owners through the Engineer. Be responsible for all encroachments onto private lands.

CONTROL

Perform all work under the absolute control of the Department of Highways. Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces and to permit public utility companies and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with such other work will be reduced to a minimum. The Department will not honor any claims for money or time extension created by the operations of such other parties. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the Department's work in general harmony and in a satisfactory manner, and his/her decision shall be final and binding upon the Contractor.

General Notes & Description of Work

Page 2 of 4

DESCRIPTION OF WORK

Except as specified herein, perform all work in accordance with the Department's Standard Specifications, Supplemental Specifications, applicable Special Notes and Special Provisions, and applicable Standard and Sepia Drawings, current editions. Furnish all materials, labor, equipment, and incidentals for the following work:

Superelevation Improvements. There are multiple curves where Superelevation Improvements are being proposed. The intent of this work is to bring a consistent pavement cross slope through the identified curves. Refer to the Superelevation Improvement Summary for locations and approximate quantities. The Contractor will utilize Leveling & Wedging and Milling & Texturing to achieve the desired superelevation improvements at the identified location(s). The Leveling & Wedging mix design will be based on the lift thickness being constructed in each curve. The Superelevation Correction Summary lists the estimated quantities of Leveling & Wedging and Milling & Texturing for each curve; however, the Engineer will make the final determination as to which bid items will be required at each superelevation improvement area, as well as the appropriate lift or mill thicknesses and number of lifts based on the existing conditions encountered at the time of construction. As a result of the superelevation improvements, the roadside shoulders, fill slopes, and/or ditches will have to be modified to match the final pavement elevations and tie in with the existing ground lines. The bid item 'Ditching & Shouldering' has been included for these roadside modifications. Refer to the detail sheet titled: DITCHING & SHOULDERING AND EMBANKMENT BENCHING DETAILS for more information.

NOTE: Some field adjustments of the proposed shoulder width, fill slope, ditch, and/or superelevation improvement may be required. The proposed shoulder and fill slope grading is intended to occur within Right-of-Way and NOT disturb any sensitive obstructions (i.e. fences, buildings, utility poles, etc.). Superelevation improvements with sensitive obstructions along the roadside shall still require the roadside shoulder and fill slope to be modified, but the slope may have to be constructed steeper than what is shown on the Superelevation Typical Section. The desire of the Department is to construct the new fill slopes at 3:1 or flatter. When a fill slope needs to be constructed steeper than 3:1 to remain within Right-of-Way or not impact a sensitive obstruction, and the existing fill slope is steeper than 3:1, then the new fill slope can be constructed steeper than 3:1, but the new fill slope shall not be constructed steeper than the existing fill slope. If a desired superelevation improvement will result in the new fill slope having to be graded steeper than the existing fill slope in order to remain within Right-of-Way or not impact a sensitive obstruction, then the superelevation rate should be modified (reduced), as directed by the engineer, in order to reduce the final change in pavement edge elevation, thereby reducing the height of the new fill slope grading, and allowing for a flatter fill slope.

Pavement Resurfacing. The existing roadway is to be resurfaced from Station 763+00 (KY 174) to Station 903+51.36 with edgeline rumble strips. There are additional Surface quantities estimated for work outside of the resurfacing limits. Refer to the Detail and Summary Sheets for more information on these work items.

Widening of Paved Shoulder. Areas have been identified along the route for widening the paved shoulder. Work will include trenching the existing roadside, placing asphalt, and regrading the roadside, as shown on the Typical Sections. Perform this work at the locations identified elsewhere in the Proposal, or the locations as directed by the Engineer. Refer to the Special Note for Shoulder Milling/Trenching for more information.

Ditching and Shouldering. Several areas throughout the project are set up for Ditching & Shouldering.

General Notes & Description of Work

Page 3 of 4

Perform Ditching & Shouldering at the locations identified elsewhere in the Proposal, or the locations as directed by the Engineer. The proposed shoulder, ditch, and/or roadside dimensions are detailed on the Typical Sections. Perform Ditching & Shouldering according to the Special Note for Ditching & Shouldering. For details of the conditions and situations commonly encountered when performing Ditching & Shouldering, refer to the detail sheets titled: DITCHING & SHOULDERING AND EMBANKMENT BENCHING DETAILS.

Pipe Replacements & Extensions. There are locations throughout the project where culvert pipes are being replaced and/or extended. Locations are noted on the Culvert Pipe Replacement & Extension Summary. Other items that may be associated with the pipe replacements and/or extensions include: Sloped & Mitered Concrete Headwalls, Intermediate Anchor/Collar, Ditching & Shouldering, Channel Lining, Erosion Control Blanket, etc. Refer to the Special Note for Pipe Replacements / Extensions for more information on this item of work.

Sloped & Mitered Concrete Headwalls. Sloped & Mitered Concrete Headwalls shall be constructed as shown on the detail sheets titled: SLOPED & MITERED CONCRETE HEADWALL DETAILS. This headwall is intended to combine the benefits of a pipe headwall with the advantages of safety and adaptability by allowing the headwall to be custom fit with the surrounding embankment. The Culvert Pipe Replacement & Extension Summary identifies which pipe ends are to receive the Sloped & Mitered Concrete Headwalls. The identified pipe ends shall have the headwall installed at an angle that matches the final embankment slopes at each location. If the pipe is on a skew, install the headwall and miter the pipe so that the concrete slope paving of the new headwall is perpendicular to the roadway. In other words, the headwall should be installed and the pipe should be mitered to match the final embankment slope, so that the roadside fill slope is fairly consistent prior to the pipe, at the pipe, and beyond the pipe. When completed the edges of the Sloped & Mitered Concrete Headwall should be flush with the surrounding ground line. Payment at the Contract unit price Each shall be full compensation for furnishing all labor, materials, equipment, and incidentals necessary to install the headwall and miter the pipe.

NOTE: For pipes that receive the Sloped & Mitered Concrete Headwall, the pipe length will be measured to the furthest point along the mitered end of the pipe.

Intermediate Anchor/Collar. There are quantities of Class A Concrete included in the contract to construct an intermediate anchor, or collar, around the pipes at the pipe extension locations. This is so the new pipe can be securely connected to the existing pipe. The intermediate anchors shall be constructed as shown on Standard Drawing RDX-060, current edition.

Channel Lining. A quantity of 480 Tons of Channel Lining Class II has been included in the Ditching and Shouldering Summary for use at the locations indicated. A quantity of 30 Tons of Channel Lining Class II has been included in the RCBC Summary for use at the locations indicated. An additional 120 Tons of Channel Lining Class II, for a total of 630 Tons of Channel Lining Class II, has been included in the contract for potential use around drop box inlets, safety box inlets, inlets and outlets of pipes, along areas of regraded ditch line and/or fill slope, and other areas as directed by the Engineer. The Contractor and Engineer should work together to determine the location and best use of Channel Lining throughout this project. The Engineer will make the final determination as to the needed quantities and placement of Channel Lining.

General Notes & Description of Work

Page 4 of 4

Erosion Control Blanket. A quantity of 10,000 square yards of Erosion Control Blanket has been included in the contract for potential use along areas of regraded shoulders, ditch lines, fills slopes and/or back slopes, inlets and outlets of pipes, and any other areas as directed by the Engineer. The Contractor and Engineer should work together to determine the location and best use of Erosion Control Blanket throughout this project. The Engineer will make the final determination as to the quantities and placement of Erosion Control Blanket.

Guardrail Replacement. Portions of existing guardrail within the project will be replaced. Refer to the Guardrail Summary for the approximate locations for guardrail replacement. The work will include removal of the existing guardrail, placement of a crushed stone base shoulder at a four foot width (with one foot of depth) and 2:1 side slopes to accommodate installation of the new guardrail and end treatments, double asphalt seal coat, placement of geotextile fabric, roadway excavation, embankment-in-place, and tree removal. See the Special Note for Guardrail for more information on this work.

Delineator White for Offset Block. KYTC has a Master Agreement Modification for Delineators that are installed atop the guardrail offset block. Bi-directional white guardrail delineators made from 0.125" aluminum sheeting measuring 4.5" wide and 10" tall. Retroreflective white sheeting must be type XI and cover top half of each side. Two 1/4" holes (1" apart beginning 1" from bottom edge) shall be pre-drilled in the bottom half to aide installation." Refer to Detail for Guardrail Delineation.

Drilled Railroad Rails and Cribbing. There are locations within the project where embankment slide repairs using drilled railroad rails and cribbing is proposed. Locations are noted on the Proposed Cribbing Summary. Refer to the Special Note for Embankment Slide Repair and the associated detail sheets for more information.

Removal of Existing Signing Assemblies and Installation of Proposed Signing. A quantity of 150 each of "Remove Sign" has been included in the Signing Summary for removal of existing signing along the corridor. An estimated quantity of new signing and sign post is included on the Signing Summary. Refer to the Special Note for Signing, Special Note for Staking, and Special Note for Signage for more details.

Trim & Remove Trees, Stumps, and Brush. There are locations within the project where Trees, Stumps, or Brush are to be removed and/or trimmed. Locations are noted on the Tree Removal & Trimming Summary. Refer to the Special Note for Tree, Stump, and Brush Removal for more information.

Temporary Striping. A quantity of 7,050 linear feet of Pave Striping – Temp Paint – 4 in has been included in the contract for potential use in the Superelevation Improvement areas, and any other areas as directed by the Engineer. The Contractor and Engineer should work together to determine any locations throughout the project requiring temporary pavement striping. The Engineer will make the final determination as to the quantities and placement of temporary pavement striping.

SPECIAL NOTE FOR DITCHING & SHOULDERING

I. DESCRIPTION

Except as provided herein, all work shall be performed in accordance with Department's Standard Specifications, Interim Supplemental Specifications, applicable Standard and Sepia Drawings, applicable Special Provisions and Special Notes, current editions. Article references are to the Standard Specifications. This project shall consist of furnishing all labor, equipment, materials, and incidentals for the following:

- (1) Maintaining and Controlling Traffic; (2) Site Preparation; (3) Ditching; (4) Shouldering; (5) Constructing Embankments, Embankment Benching, and/or Excavation; (6) Erosion Control; and (7) Any other work as specified in this Contract.

II. MATERIALS

All materials shall be sampled and tested in accordance with the Department's Sampling Manual and the materials shall be available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these Notes.

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Erosion Control.** See Special Note for Erosion Control.
- C. Channel Lining, Class II.** When listed as a bid item, furnish Channel Lining, Class II as per Section 805.
- D. Geotextile Fabric Type IV.** When listed as a bid item, furnish Geotextile Fabric Type IV as per Section 843.

III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Erosion Control.** See Special Note for Erosion Control.
- C. Site Preparation.** Be responsible for all site preparation including, but not limited to: staking; clearing, grubbing, and removal of all obstructions or any other items; excavation, embankment benching, compacting embankment in place; temporary pollution and erosion control; disposal of excess, waste, and debris; and final dressing, cleanup, and seeding and protection. Perform all site preparation as approved or directed by the Engineer.
- D. Staking.** See Special Note for Staking.

Ditching & Shouldering

Page 2 of 5

E. Ditching & Shouldering. All work shall be completed according to Section 209, or as specified in the DITCHING & SHOULDERING AND EMBANKMENT BENCHING DETAILS, the Typical Sections, the Plan Sheets, or as directed by the Engineer. Ditching & Shouldering shall consist of any necessary clearing, grubbing, grading, and/or reshaping of the existing shoulder, ditch, and/or roadside to achieve the proposed shoulder, ditch, and/or roadside dimensions detailed on the Typical Sections. Depending on the existing conditions encountered and to achieve the dimensions as detailed in the Typical Sections, Ditching & Shouldering may also include, but is not limited to: embankment benching, excavating and removing excess material, excavation of rock, providing additional earth material suitable for vegetation growth and grading, shaping, and compacting the earth material.

Provide positive drainage of ditches and slopes at all times during and upon completion of construction. When asphalt surfacing or resurfacing is included in the contract, perform all ditching and as much of the shouldering operations as is practical before beginning final surfacing operations.

F. Embankment Benching. Embankment Benching shall be required when the existing groundline has an incline greater than 15%. Any and all required embankment benching shall be incidental to the bid item DITCHING & SHOULDERING. For more information refer to the DITCHING & SHOULDERING AND EMBANKMENT BENCHING DETAILS.

G. Channel Lining. Install Class II Channel Lining along any sections of ditches identified in the Proposal, along any fill or ditch backslopes identified in the Proposal requiring Slope Protection, or any other locations the Engineer directs for slope protection or erosion control.

H. Right-of-Way Limits. The Department has not established exact limits of the Right-of-Way. Unless a consent and release form is obtained from the adjoining property owner, limit work activities to the obvious Right-of-Way and staging areas secured by the Contractor at no additional cost to the Department. In the event that private improvements (i.e. fences, buildings, etc.) encroach upon the Right-of-Way, the contractor shall notify the Engineer and limit work activities in order to NOT disturb the improvements. If they become necessary, the Department will secure consent and releases from property owners through the Engineer. Be responsible for all encroachments onto private lands. Plans showing existing Right-of-Way along the project corridor may be available at: <http://maps.kytc.ky.gov/photolog/?config=ProjectArchives>

I. Property Damage. The Contractor shall be responsible for all damage to public and/or private property resulting from the Contractor's activities. Repair or replace damaged roadway features in like kind materials and design as directed by the Engineer at no additional cost to the Department. Repair or replace damaged private property in like kind

Ditching & Shouldering
Page 3 of 5

materials and design to the satisfaction of the owner and the Engineer at no additional cost to the Department.

- J. Coordination with Utility Companies.** Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs due to the Contractor's operations at no additional cost to the Department. NOTIFY THE ENGINEER AND THE UTILITY OWNER(S) IMMEDIATELY WHEN IT IS DISCOVERED OR ANTICIPATED THAT ANY UTILITY CONFLICT COULD DELAY THE CONTRACTOR'S OPERATIONS.

If the total delay exceeds ten working days, an extension of the specified completion date will be negotiated with the Contractor for delay to the Contractor's work; however, no extension will be granted for any delay caused by the Contractor's failure to notify the Engineer and/or the utility company as specified above when a conflict is discovered or anticipated as specified.

- K. Caution.** The information in this proposal and shown on the plans and the type of work listed herein are approximate only and are not to be taken as an accurate evaluation of the materials and conditions to be encountered during construction; the bidder must draw their own conclusions. The Department does not give any guarantee as to the accuracy of the data and no claim for money or time extension will be considered if the conditions encountered are not in accordance with the information shown.

- L. Control.** Perform all work under the absolute control of the Department. Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces, and to permit public utility companies and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with such other work will be reduced to a minimum. The Department will not honor any claims for money or time extension created by the operations of such other parties.

Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the Department's work in general harmony and in a satisfactory manner, and the Engineer's decision shall be final and binding upon the Contractor.

- M. Clean Up, Disposal of Waste.** Clean up the project area as work progresses. Dispose of all removed excess material, debris, and other waste at approved sites off the Right of Way

Ditching & Shouldering
Page 4 of 5

obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.

- N. Final Dressing, Seeding and Protection.** Grade all disturbed areas to blend with the adjacent roadways features and to provide a suitable seed bed. Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

IV. METHOD OF MEASUREMENT

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Erosion Control.** See Special Note for Erosion Control.
- C. Site Preparation.** Other than the bid items listed, the Department will NOT measure Site Preparation for payment, but shall be incidental to the project bid items.
- D. Staking.** See Special Note for Staking.
- E. Ditching & Shouldering.** Contrary to Section 209.04 the Department will measure the bid item DITCHING & SHOULERING in linear feet along the centerline of the roadway as the length of the actual ditching and/or shouldering work performed. Further, this measurement will only include one side of the roadway. Therefore, for areas where ditching and shouldering occurs on both sides of the road, the Department will measure each side independently. The Department will not measure cleaning pipe structures 36 inches or less in diameter or reshaping any deformed ends on metal entrance pipes that are to remain in place, as these operations are considered incidental to the bid item DITCHING & SHOULERING.
- F. Embankment Benching.** The Department will not measure Embankment Benching for payment. Any and all required embankment benching shall be incidental to the bid item DITCHING & SHOULERING.
- G. Channel Lining, Class II.** When listed as a bid item, Class II Channel Lining shall be measured according to Section 703.04.
- H. Geotextile Fabric, Type IV.** When listed as a bid item, Geotextile Fabric, Type IV shall be measured according to Section 214.04.
- I. Clean Up, Disposal of Waste, Final Dressing, Seeding and Protection.** The Department will NOT measure for payment the following activities: Clean Up, Disposal of Waste, and Final Dressing. These activities shall be incidental to the project bid items. Seeding and Protection shall be measured according to Section 212.

Ditching & Shouldering
Page 5 of 5

V. BASIS OF PAYMENT

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Erosion Control.** See Special Note for Erosion Control.
- C. Staking.** See Special Note for Staking.
- D. Ditching & Shouldering.** The Department will make payment for the completed and accepted quantities under the bid item DITCHING & SHOULERING. The Department will consider payment full compensation for furnishing all labor, materials, equipment, and incidentals necessary to preform Ditching & Shouldering as required by these notes, at the locations indicated on the summary sheets, plans, and/or as directed by the Engineer.
- E. Channel Lining, Class II.** When listed as a bid item, the Department will make payment for Class II Channel Lining according to Section 703.05.
- F. Geotextile Fabric, Type IV.** When listed as a bid item, the Department will make payment for Geotextile Fabric, Type IV according to Section 214.05.

SPECIAL NOTE FOR TREE, STUMP, AND BRUSH REMOVAL

I. DESCRIPTION

All work shall be performed in accordance with the Department's current Standard Specifications for Road and Bridge Construction and applicable Special Provisions, except as hereafter specified. Article references are to the Standard Specifications.

This work shall consist furnishing all equipment, labor, materials, and incidentals for the following: (1) Site Preparation; (2) Maintaining and controlling traffic; (3) Temporary erosion control and temporary pollution control; (4) Cutting, trimming, and/or removing trees, stumps, and/or brush as specified or directed by the Project Engineer; (5) Treating all cut stumps required by Project Engineer to prevent re-sprouting; (6) Clean up and disposal of waste; (7) Final dressing and seeding and protection; and (8) all other work specified in the Contract.

II. MATERIALS

All materials shall be sampled and tested in accordance with the Department's Sampling Manual and the materials shall be available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these Notes.

- A. Maintain and Control Traffic.** The Contractor shall maintain and control traffic in accordance with the Traffic Control Plan.
- B. Seeding and Protection.** Use applicable Seed Mixture as specified per Section 212.03.03.
- C. Erosion Control.** See the Special Note for Erosion Control.

III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic.** The Contractor shall maintain and control traffic in accordance with the Traffic Control Plan.
- B. Cutting, Trimming, and/or Removing Trees, Stumps, and/or Brush.** The Contractor shall cut trees and/or bushes as close to the ground as possible; three inches (3") or less from ground line. The tree trimming listed in the summary shall be cleared as shown on the Tree Trimming Detail. Grinding of all tree stumps within the mowing zone shall be required as directed by the Engineer. All stumps that are listed on the summary and/or directed by the Engineer to be removed, are to be removed via mechanical grinding, or other methods approved by the Engineer, to a minimum depth of four (4) inches below the surrounding grade line. For trees that are cut, but will not be required to have their stump removed, treat the stump, within one hour of cutting, with the specified herbicide solution.

Tree, Stump, & Brush Removal
Page 2 of 5

Replace and level any and all soil disturbed during the tree, stump, and brush removal and trimming operations. Leave the soil in a condition suitable for seeding that is level with surrounding soil grade, with no holes or indentions to catch water or present unsafe mowing conditions. This work will be incidental to the bid items "Remove Trees or Stumps" and "Trim and Remove Trees and Brush."

- C. Removal of Tree, Stump, and Brush Debris.** The Contractor will remove all debris and biomass from the trimming and/or removal of trees, stumps, and/or brush from the work site and dispose of such off the right-of-way in accordance with local, state, and federal solid waste laws and regulations. Cleanup and remove all existing down trees and brush located within the designated areas. At the discretion of the Project Engineer, the contractor may be permitted to chip and blow biomass onto non-mowing zones. Chips shall not be blown onto areas that would potentially restrict the flow of water in drainage ditches. All un-chipped biomass must be removed from roadway right-of-ways.

The Contractor shall keep the work zone free of accumulated waste material and debris at all times. Remove and dispose of all tree, stump, and brush chips off the right-of-way. Remove and dispose of all debris and waste material off the right-of-way as work is completed and at the end of each workday. Remove desirable wood pieces from the right-of-way at the end of each workday. Stockpile trees and brush off the right-of-way. At the discretion of the Project Engineer, the Contractor may be permitted to stockpile trees and brush at approved locations along the right-of-way.

The Contractor shall immediately correct any disturbance to all drainage features and structures caused by the Contractor's work.

- D. Stump Treatment.** Within one hour of cutting, the Contractor shall apply a stump treatment mix consisting of fifty percent (50%) Glyphosate (EPA Reg. No. 524-579) with water and add twelve (12) ounces of Imazapyr (EPA Reg. No. 241-431), as specified, per gallon of solution. The addition of a non-ionic surfactant 5% (v/v) shall be added to the solution to increase uptake of the herbicide solution into the root system. Generic formulations are not acceptable. Mix the herbicide solution in the presence of the Inspector. Include a color indicator in the herbicide solution to mark the treated stumps. Spray or paint the herbicide solution onto all cut stumps within one hour after cutting. Apply the herbicide solution in a manner to avoid drift onto surrounding vegetative ground cover. Stumps in the mowing zone, designated for mechanical grinding treatment, need not receive the herbicide treatment.

Provide herbicide material for the treatment of cut stumps meeting the following criteria:

a. Glyphosate

Active ingredient: **(Glyphosate)**

*Glyphosate, N-(phosphonomethyl)glycine, in the form of its

Tree, Stump, & Brush Removal
Page 3 of 5

potassium salt.....	48.7%
Inert ingredients	51.3%
Total	100.0%
* Contains 660 grams per liter or 5.5 pounds per U.S. gallon of the active ingredient glyphosate, in the form of its potassium salt. Equivalent to 540 grams per liter or 4.5 pounds per U.S. gallon of the acid, glyphosate. EPA Reg. No. 524-579	

b. Imazapyr

Active ingredient: (Imazapyr)	
*Isopropylamine salt of Imazapyr 2-[4,5-dihydro-4-methyl-4-(1methylethyl)-5oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid)	26.7%
Inert ingredients	73.3%
Total	100%
* Equivalent to 21.8 percent 2-[4,5-dihydro-4-methyl-4-(1methylethyl)-5oxo-1H-imidazolyl]-3-pyridinecarboxylic acid or 2 pounds acid per gallon. EPA Reg. No. 241-431	

KRS 217B requires that any individual who applies pesticides to Kentucky Highway Right-of-Way areas must be certified as a Pesticide Applicator under Category 6 guidelines. Comply with all current laws and regulations established by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and by KRS 217B that regulate the handling, use, and application of pesticides.

E. Property Damage. The Contractor will be responsible for all damage to public and/or private property resulting from his work.

F. Coordination with Utility Companies. NOTICE: Utility locations shown in the plans are approximate and have not been specifically located by the Department. Locate all underground, above ground and overhead utilities prior to beginning construction. The Contractor shall have the responsibility for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Utility Owner while they relocate their facilities. The Contractor shall be responsible for repairing all utility damage that occurs as a result of his operations.

G. Right-of-Way Limits. The exact limits of the Right-of-Way have not been established by the Department. The Contractor shall limit his activities to obvious Right-of-Way, permanent or temporary easements, and any work areas secured by consent and release of the adjacent property owners. The Contractor shall be responsible for all encroachments onto private lands.

Tree, Stump, & Brush Removal
Page 4 of 5

- H. Clean Up, Disposal of Waste.** Clean up and dispose of all removed debris by the end of each work day, and other waste as per Section 204.03.08. The Department will incur no cost to obtain the disposal sites. The Department will NOT make direct payment for clean up or disposal of waste and debris from the project. See the Special Provision for Waste and Borrow Sites.
- I. Final Dressing, Seeding and Protection.** Apply final dressing, class A to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the appropriate Seed Mixture as specified in Section 212.03.03.
- J. Erosion Control.** See the Special Note for Erosion Control.

IV. METHOD OF MEASUREMENT

- A. Maintain and Control Traffic.** See the Traffic Control Plan.
- B. Site preparation.** Other than the bid items listed, site preparation will NOT be measured for payment, but shall be incidental to the bid items “Remove Trees or Stumps” and/or “Trim & Remove Trees & Brush”.
- C. Remove Trees or Stumps.** The Department will measure the quantity as each tree or stump removed. Trees or stumps to be removed under this bid item are those listed on the Plans or in this Proposal, or as directed by the Engineer.
- D. Trim & Remove Trees & Brush.** The Department will measure the quantity as per linear foot, per side of the highway. See the Tree Trimming Detail for the horizontal and vertical trimming dimensions. The horizontal width is taken from the edge of pavement measured perpendicular to the roadway but not to extend beyond the obvious Right-of-Way limits, or as directed by the Engineer.
- E. Stump Treatment.** The Department will NOT measure for payment the operation of Stump Treatment. This activity shall be incidental to the bid items “Remove Trees or Stumps” and/or “Trim & Remove Trees & Brush”.
- F. Clean Up, Disposal of Waste.** The Department will NOT measure for payment the operations of Clean Up and Disposal of Waste. These activities shall be incidental to the project bid items.
- G. Final Dressing, Seeding and Protection.** The Department will NOT measure for payment the operations of Final Dressing. Seeding and Protection will be measured according to Section 212.

Tree, Stump, & Brush Removal
Page 5 of 5

H. Erosion Control. See the Special Note for Erosion Control.

V. BASIS OF PAYMENT

A. Maintain and Control Traffic. See the Traffic Control Plan.

B. Remove Trees or Stumps. The Department will make payment for the completed and accepted quantities of each tree or stump removed. The Department will consider payment at the contract unit price as full compensation for furnishing all materials, equipment, labor, other expenses, and all incidentals necessary to complete the work of removing the trees and/or stumps.

C. Trim & Remove Trees & Brush. The Department will make payment for the completed and accepted quantities per linear foot. The Department will consider payment at the contract unit price as full compensation for furnishing all materials, equipment, labor, other expenses, and all incidentals necessary to complete the work of trimming and removing the trees and/or brush.

D. Erosion Control. See the Special Note for Erosion Control.

SPECIAL NOTE FOR EMBANKMENT SLIDE REPAIR

I. DESCRIPTION

Except as specified herein, perform all work in accordance with the Department's Standard and Supplemental Specifications and Standard and Sepia Drawings, current editions. Article references are to the Standard Specifications.

Furnish all equipment, labor, materials, and incidentals for the following work items:

- (1) Site preparation;
- (2) Furnish and install railroad rails;
- (3) Furnish and install cribbing;
- (4) Excavate, place geotextile material, and backfill the area around the railroad rails and on the fill slope;
- (5) Reconstruct shoulder area;
- (6) Install guardrail;
- (7) Maintain and Control Traffic; and
- (8) any other work as specified by this contract.

Repairs using drilled railroad steel and guardrail cribbing are to occur at locations indicated on the Plan Sheets and/or Summary Sheets. Begin and End limits at each area are to be field verified with approval from the Engineer.

II. MATERIALS

All materials shall be sampled and tested in accordance with the Department's Sampling Manual and the materials shall be available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these Notes.

- A. Railroad Rails.** Use recycled (used) railroad rails classified with a nominal weight of 130 lb/yd (pounds per yard) size or greater. Use only visibly straight recycled railroad rails with no splices. The Engineer will verify rail nominal weights (Manufacturer's Stamp with lb/yd, date, etc.) Provide Certification for nominal weight if the Manufacturer's Stamp is unidentifiable.
- B. Wall Cribbing.** Use recycled (used) steel "W" beam guardrail. **Cribbing material will be furnished by the Department of Highways.** Wall cribbing will be located at the *Bailey Bridge Yard in Frankfort, KY.* The Contractor will be responsible for picking up the cribbing material and delivering it to the project site as an incidental item.
- C. Backfill material for Drilled Sockets.** Use the following for backfill material for Drilled sockets: concrete or grout. Do not use auger tailings. Engineer will use visual inspection and/or material testing, as applicable to determine acceptability.
- D. Fill Material for CRIBBING.** Use one of the following backfill materials: Kentucky Aggregate Gradation No. 2's. Backfill material shall meet requirements of Section 805. The Engineer will use visual inspection and/or material testing, as applicable, to determine acceptability.

Embankment Slide Repair
Page 2 of 6

- E. DGA.** Furnish DGA as per Section 805. Do not use Crushed Stone Base.
- F. Final Dressing, Seed and Protection.** Use seed mixture(s) according to Section 212.
- G. Geotextile Fabric.** Furnish Geotextile Fabric Type IV as per Section 843.
- H. Erosion Control.** See Special Note for Erosion Control.

III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Staking.** Establish proper slope elevations and ratios, shoulder widths, existing ditch profile and final ditch profile to insure positive drainage. Be responsible for field layout. Positive drainage is required upon completion of the project and is the responsibility of the Contractor.
- C. Site Preparation.** Prepare repair sites. This includes clearing and grubbing, if necessary. Remove all obstructions. Sweep and remove debris, if necessary. The area to be cleared has not been measured by the Department and the bidder must draw his own conclusions. Construct silt checks, temporary silt fence, or other erosion control devices, as necessary to satisfy the BMP, at locations directed by the engineer. The engineer shall approve all site preparation. The Department will not make direct payment for site preparation.
- D. Installation of Railroad Rails.** See attached summary for site locations and estimated quantities of materials required. The depth to rock shown on the summary is approximate. No geotechnical borings were advanced, and, as such, rock depths may differ from those estimated. Therefore the contractor is responsible for determining actual depth to rock and providing to the department to be approved by the engineer. The embankment failures at these sites are caused by erosion from steep slopes and poor drainage.

NOTE TO ENGINEER AND CONTRACTOR: ABSOLUTELY NO CHANGE IN SCOPE OF WORK OR INCREASE IN QUANTITIES WILL BE ALLOWED ON THIS PROJECT WITHOUT PRIOR WRITTEN APPROVAL FROM THE TEBM (Transportation Engineering Branch Manager) OR HIS REPRESENTATIVE IN THE DISTRICT OFFICE.

THE DEPARTMENT SHALL NOT BE LIABLE FOR PAYMENTS DUE TO ADDITIONAL WORK THAT HAS NOT BEEN AUTHORIZED BY THE AFOREMENTIONED PERSONS.

Embankment Slide Repair

Page 3 of 6

Install used railroad rail piling in drilled sockets in rock or stable material under the landslides (see figure 1) or the eroded areas (see figure 2) as project location dictates or as directed by the Engineer.

Drill the socket, furnish, and install the railroad rails into holes at slide locations. If the Engineer determines from sounding obtained at a drilled socket that railroad rail piling cannot be used in that socket, the depth of the socket shall be measured and 50% of the depth shall be paid as "Railroad Rail-Drilled". Drill sockets into solid rock, if possible. The Department will monitor each hole, which will serve as a sounding for the rail to be installed in it. Embed the railroad rail into solid rock no less than one-half the free end length of the rail. (See figure 1 and figure 2). If solid rock cannot be obtained, the Engineer will determine the length of embedment required in other stable foundation. Allow adequate size of the drilled socket to allow free insertion of the railroad rail, but the maximum socket size is 1 foot in diameter.

After each hole is drilled, install railroad rail immediately with the flanges positioned perpendicular to the direction of the landslide or break (see figure 3). Determine the height of rail that is needed to reestablish pavement and shoulder typical section. Cut off excess rail flush with the proposed ground line that is not needed. Use cutoffs elsewhere in the project if possible; unusable cutoffs remain the property of the Contractor.

After railroad rail is installed, immediately backfill the drilled hole with the approved materials. Shovel the backfill material into the hole in small amounts. Avoid bridging between the rail and the sides of the hole. Do not use Auger tailings as backfill material.

When double or triple rows are required, stagger the rows to obtain the required spacing. Keep the spacing between the rows of rails as close as is practical; do not space between the rows of more than 2 feet, if possible. See figure 3 (Case II and Case III) for the diagrams showing two (2) or three (3) rows of rails. Select the spacing as per Table 1 for all 130 pound per yard rail or greater. The Department shall approve the selection prior to work being performed.

Crib any exposed portion of railroad rail before placing backfill.

- E. Excavation and Backfill.** Excavate each repair area to provide a platform for drilling the used railroad rails, if necessary. Excavate for roadway ditches as necessary for slope, shoulder and pavement drainage. Place geotextile fabric, then construct embankment behind railroad rails, cribbing, and on slope, as per Section 206. Construct embankment up to the approximate existing pavement elevation.

Reconstruct the shoulder area with DGA up to the approximate existing elevation and width of the surrounding typical section or to a minimum width of 2 Feet at each slide location. Do not pond water on the shoulder area or at the shoulder edge. Reconstruct the shoulder before installing guardrail.

Embankment Slide Repair
Page 4 of 6

DO NOT USE EXCAVATED MATERIAL FROM THE SITE AS FILL MATERIAL. Excess excavation may be wasted at sites on the right-of-way, ONLY if approved by the Engineer. Material may NOT be wasted in flood prone areas or in streams.

If the Engineer deems no suitable sites are available within the right-of-way, the Contractor will be required to waste excess material off the right-of-way at sites obtained by the Contractor at no cost to the Department.

- F. Installation of Wall Cribbing.** Install Cribbing as shown on Figure 1 or Figure 2 as slide location dictates or as directed by the Engineer. Extend wall cribbing 2 feet below the existing ground line. If bedded rock is encountered, install the cribbing to the bedded rock only. If necessary, the Engineer will direct changes to this procedure. Furnish all labor and equipment to deliver and install wall cribbing on the recycled (used) railroad rail piling. Wall cribbing shall be lapped, bolted, and attached solid to the drilled railroad rails.
- G. Final Dressing, Seeding and Protection.** Apply Final Dressing, Class A to all disturbed areas, both on and off the right-of-way. Sow with Seed Mixture No. 1. The Department will NOT make direct payment for final dressing, or seeding and protection, but shall be incidental to Erosion Control.
- H. On-Site Inspection.** Each Contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting his bid and shall thoroughly familiarize themselves with the existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made.
- I. Right-of-Way Limits.** The Department has not established exact limits of the Right-of-Way. The Contractor shall make every effort to limit his activities to obvious right-of-way and permanent or temporary easements and shall be responsible for encroachments onto private lands.
- J. Property Damage.** The Contractor will be responsible for all damage to public and/or private property resulting from his work.
- K. Erosion Control.** See Special Note for Erosion Control.

IV. METHOD OF MEASUREMENT

- A. Maintain and Control Traffic.** See Traffic Control Plan.

Embankment Slide Repair
Page 5 of 6

- B. Staking.** See Special Note for Staking.
- C. Site Preparation.** Other than the bid items listed, site preparation will NOT be measured for payment, but shall be incidental to the bid item Excavation and Backfill.
- D. Railroad Rail-Drilled.** The Department will measure the finished in-place length of this item in Linear Feet. Laps, cutoffs, excess, and waste will NOT be measured for payment. If the Engineer determines from the sounding obtained at a drilled socket that railroad rail piling cannot be used in that socket, the depth of the socket shall be measured and 50% of the depth shall be paid as Railroad Rail-Drilled.
- E. Excavation and Backfill.** The Department will measure this item in cubic yards. The Department will measure the quantity in the field as per Section 204 (Roadway Excavation) or other accepted methods of measurement as directed by the Engineer.
- F. Wall Cribbing.** The Department will measure this item in square feet finished in placed area. Laps, cutoffs, excess and waste will not be measured for payment.
- G. Geotextile Fabric.** The Department will measure Geotextile Fabric Type IV according to Section 214.
- H. DGA.** The Department will measure according to Section 302.
- I. Clean Up, Disposal of Waste.** The Department will NOT measure for payment the operation of Clean Up and Disposal of Waste. These activities shall be incidental to project bid items.
- J. Final Dressing, Seeding and Protection.** The Department will NOT measure for payment the operation of Final Dressing. This shall be incidental. The Department will measure Seeding and Protection according to Section 212.
- K. Erosion Control.** See Special Note for Erosion Control.

V. BASIS OF PAYMENT

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Staking.** See Special Note for Staking.
- C. Railroad Rail-Drilled.** The Department will make payment for the completed and accepted quantities under the bid item: Railroad Rail-Drilled. The Department will

Embankment Slide Repair
Page 6 of 6

consider payment full compensation for all work required in these notes and elsewhere in the Contract.

- D. Excavation and Backfill.** The Department will make payment for the completed and accepted quantities under the bid item: Excavation and Backfill. Payment will be based on quantity measured in the field. The Department will consider payment full compensation for all work and incidentals necessary to excavate and backfill the areas indicated on the plans or as directed by the Engineer.
- E. Wall Cribbing.** The Department will make payment for the completed and accepted quantities under the bid item: Cribbing. Payment will be based on the quantity installed in the field. The Department will not make separate payment for the hauling of the wall cribbing to the project site(s). The Department will consider payment full compensation for all work required on the project.
- F. Geotextile Fabric.** The Department will make payment of Geotextile Fabric Type IV according to Section 214.
- G. DGA.** The Department will make payment according to Section 302.
- H. Erosion Control.** See Special Note for Erosion Control.

SPECIAL NOTE FOR SHOULDER MILLING/TRENCHING

Trench shoulders as shown on the Typical Section. The Engineer may eliminate locations along the route from shoulder trenching (e.g. road approaches, turn lanes, entrances, etc.). For entrances and road approaches, the Engineer will determine whether to omit the trenching or continue the trenching across the entrance or approach. **DO NOT** trench across entrances or road approaches without the Engineer's approval. If trenching is achieved by means other than milling, saw cut the pavement 4.5 inches deep to create a smooth edge prior to excavating the shoulder trench. Excavate the material from the shoulder and maintain the proposed cross-slope as shown on the Typical Sections. The intent is to mill, or excavate, the entire trench so that the proposed shoulder slope is retained at the end of the paving operation. Reshape and compact excavated material from the trench on the outside edge of the newly paved shoulder as shown on the Typical Section.

Retain possession of excess materials and/or materials the Engineer deems unsuitable for reuse and waste the materials off the right-of-way at sites obtained by the Contractor at no additional cost to the Department. See Special Provision for Waste and Borrow.

Accept payment at the contract unit price per square yard for **SHOULDER MILLING/TRENCHING** as full compensation for all labor, materials, equipment, and incidentals for excavating the shoulder trench and reuse and/or disposal of the excavated material.

SPECIAL NOTE FOR BOX CULVERT EXTENSIONS

I. DESCRIPTION.

Except as provided herein, perform all work in accordance with the Department's Standard Specifications, interim Supplemental Specifications, Standard and Sepia Drawings, and Special Notes and Special Provisions, current editions. Section references are to the Standard Specifications. This project shall consist of furnishing all labor, equipment, materials, and incidentals for the following:

(1) Contractor staking; (2) Site preparation; (3) Foundation preparation and construction of reinforced concrete box culvert extensions and headwalls; (4) Maintain and Control Traffic; and (5) all other work specified as part of this contract.

II. MATERIALS.

Provide for sampling and testing of all materials in accordance with the Department's Sampling Manual. Make materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these notes.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Erosion Control. See Special Note for Erosion Control.

C. Foundation Preparation. Furnish materials according to Section 603, the drawings, and as directed by the Engineer.

D. Reinforced Concrete Box Culvert Extensions. Furnish Class A Concrete and deformed Steel Reinforcement according to Sections 601 and 602. Contrary to Section 602.03.03, field bending bars will be allowed; however, obtain the Engineers approval of proposed field bending methods prior to bending. Furnish additional reinforcement to provide adequate splice lengths with existing box culvert steel as determined by the Engineer.

E. Steel Reinforcement. See Section 811.

III. CONSTRUCTION.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Erosion Control. See Special Note for Erosion Control.

C. Site Preparation. Be responsible for all Site Preparation, including but not limited to Clearing and Grubbing; Removing pavement; Tree and Stump removal; Temporary Fencing; Roadway Excavation and Structure Excavation; Embankment and Embankment in Place; removal of obstructions or any other items; Grading, Reshaping, and Compacting; Ditching and Shouldering, obtaining borrow and waste sites, and disposal of materials, waste, and debris; cleaning inlet and outlet ditches; and restoration, cleanup and final dressing.

Box Culvert Extensions

Page 2 of 6

Clear and Grub only the minimum area required for construction and/or as directed by the Engineer. Limit clearing and grubbing to the absolute minimum required to construct the box culvert extensions. Obtain the Engineer's approval before removing trees and stumps from the cleared areas. Phase construction such that the potential for erosion is as minimal as possible.

Excavate as needed to remove any portion of the existing structure necessary for construction of the box culvert extension. Perform any ditching or grading as directed by the Engineer. Stockpile suitable materials for incorporation into the work as approved by the Engineer.

Be responsible for all excavation (common, roadway, structure, solid rock, and unclassified) required for foundation preparation, toe walls, and all other excavation required for the box culvert extensions. Excavate rock in channel as required to allow for construction of foundation and construction of box culvert extensions.

Be responsible for all embankment, embankment in place, and borrow required for backfilling the box culvert extension, constructing widened roadway and shoulder transitions, and all other embankment required to complete the work.

Provide positive drainage of slopes and ditches at all times during and upon completion of construction. Waste all removed materials not incorporated into the work at sites off the right of way obtained by the Contractor at no additional cost to the Department (see the Special Provision for Waste and Borrow Sites). Perform all excavation and removal of obstructions only as approved or directed by the Engineer

D. Remove Headwall. Remove the existing headwall(s) and wingwalls at the existing box culvert end(s) to sound concrete masonry, or as directed by the Engineer. Before removing any concrete masonry saw around the perimeter of the removal area on the interior and exterior to a depth of 1 inch. When sawing, take care not to cut into the existing steel reinforcement. Do not kink or unnecessarily bend exposed existing steel reinforcement. Remove structure excavation to solid rock or as directed by the Engineer, and prepare foundation. Existing steel reinforcement shall be thoroughly cleaned of concrete and straightened for use to bond the new concrete and reinforcement with a minimum overlap of 1'-9", unless otherwise shown in the drawings. As an alternative, if the existing headwall is sound, the Engineer may approve leaving the existing headwall in place. If the Engineer approves leaving the existing headwall in place, center 3'-0" long, #6 dowel bars at 12" spacing into the existing slabs and walls, embedded 1'-6" deep into the existing box culvert concrete, and set with an adhesive anchorage system to provide a pullout strength of equal or greater capacity than the corresponding reinforcing steel.

E. Box Culvert Extensions. Construct the box culvert extension(s) according to the notes and details in the drawings, and Sections 601, 602, 603, 610, and/or any other applicable Standard Specifications. Class A Concrete shall be used throughout. Bond the proposed plastic concrete to the existing hardened concrete in all locations using a Type V Epoxy Resin or other approved

Box Culvert Extensions

Page 3 of 6

structural adhesive, as prescribed in Section 826. Follow the manufacturer's application instructions. All exposed concrete edges shall be beveled $\frac{3}{4}$ ", unless otherwise noted. Reinforcement shall have a 2" clear distance to the proposed face of concrete, unless otherwise noted. Obtain the Engineer's approval of the final centerline, flow line, length, skew, and revised dimensions and/or steel pattern, if any, of each box culvert extension prior to placing concrete.

The Contractor is required to complete the box culvert extension(s) in accordance with the plans and all applicable specifications. The cost of any and all labor, materials, equipment, and/or any other items necessary to construct the box culvert extension(s) shall be incidental to the most appropriate bid items. Incidental items may include, but are not limited to, cofferdams, shoring, excavation, backfilling, and phased construction.

F. Remove Concrete Masonry. If the Engineer approves leaving the existing headwall(s) in place, a portion of the existing parapet(s) may need to be removed in order to construct a shoulder of suitable depth from the edge of pavement to the proposed headwall. Any necessary removal of a portion of the existing parapet shall be considered Site Preparation and shall be incidental to the box culvert bid items. Also, if the existing headwall(s) are left in place, one or both of the existing wingwalls, or a portion of either wingwall may need to be removed in order to construct the proposed box culvert extension(s) and/or headwall(s). In this situation, any necessary removal of the existing wingwall(s), or any portion thereof, shall be considered Site Preparation and shall be incidental to the box culvert bid items.

G. Embankments. Backfill box culvert extensions and construct embankments, slopes, roadway shoulders, and ditches as shown on the drawings, or as directed by the Engineer. Warp and tie the embankment slopes into the adjacent existing roadway to match the existing slopes and ditches. Provide positive drainage of slopes and ditches at all times during and upon completion of construction.

H. Ditching, Shouldering. Construct ditches and shoulders to provide positive drainage. Transition the ditches and shoulders between the existing typical section and the reconstructed roadway at the box culvert extension site(s). Clean all new and existing cross drainage and entrance structures within the limits of the ditching areas according to Section 209.03.B.

I. Clean Culvert. Remove all deleterious material and objects not native to the box culvert barrel, such as, but not limited to debris and silt. The Contractor may choose to clean the box culvert prior to, or after, the proposed box culvert extension work. If the Contractor chooses to clean the box culvert prior to the proposed box culvert extension work, and additional debris, silt, etc. builds up during the box culvert extension operations, the Contractor shall remove the additional debris, silt, etc. at no additional cost to the Department, after the box culvert extension operations are complete.

NOTE: The proposal lists the existing box culverts that are to receive the Clean Culvert bid item. These identified box culverts are those that had existing debris, silt, etc. at the time the proposal was developed. The Engineer and the Contractor are encouraged to review the proposed box

Box Culvert Extensions

Page 4 of 6

culvert extension site(s) prior to the Contractor beginning the box culvert extension work and determine if the Clean Culvert bid item applies. The Engineer shall determine the final approved quantities. If an existing box culvert location has a buildup of debris, silt, etc., but the Clean Culvert bid item is NOT listed in the proposal for that box culvert, the Contractor shall notify the Engineer prior to beginning box culvert extension operations, so that the Engineer can confirm that the existing box culvert has a buildup of debris, silt, etc. If the contractor does not notify the Engineer of this situation prior to beginning the box culvert extension operations, the Engineer will assume the buildup was a result of the Contractor's operations, and the cost of cleaning the box culvert shall be at no additional cost to the Department.

J. Property Damage. Be responsible for all damage to public and/or private property resulting from the work. Restore damaged roadway features and private property at no additional cost to the Department.

K. On-Site Inspection. Before submitting a bid for the work, make a thorough inspection of the site and determine existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid to be evidence of this inspection having been made. The Department does not warrant or give any guarantee as to the accuracy of the data and information shown and no claims for money or time extensions will be considered if the conditions encountered, items used or omitted, and final quantities required are not in accordance with the information shown.

L. Coordination with Utility Companies. Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require utilities to be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs as a result of the Contractor's operations at no additional cost to the Department.

M. Right of Way Limits. The Department has not established the exact limits of the Right-of-Way. Limit work activities to obvious Right-of-Way, permanent or temporary easements, and work areas secured by the Department through consent and release of the adjacent property owners. Be responsible for all encroachments onto private lands.

N. Control. Perform all work under the absolute control of the Department. Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces and to permit public utility companies and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with such other work will be reduced to a minimum. The Department will not honor any claims for money or time extension created

Box Culvert Extensions
Page 5 of 6

by the operations of such other parties. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the Department's work in general harmony and in a satisfactory manner, and his decision shall be final and binding upon the Contractor.

O. Clean Up, Disposal of Waste. Dispose of all removed concrete, debris, and other waste and debris off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.

P. Final Dressing, Seeding and Protection. Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

IV. MEASUREMENT.

Quantities shown on the summaries and drawings are approximate only. The Department will measure for payment only the bid items listed and the actual quantities incorporated in the work. All other items required to complete the construction shall be incidental to the listed bid items.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Erosion Control. See the Special Note for Erosion Control.

C. Site Preparation. Other than the bid items listed, the Department will not measure Site Preparation for separate payment, but shall be incidental to the applicable project bid items.

D. Remove Headwall. The Department will measure the removal of existing headwalls as Each. If the Engineer allows a proposed box culvert extension to be constructed without removing the existing headwall, the Remove Headwall bid item shall not be measured for payment.

E. Foundation Preparation. The Department will measure Foundation Preparation of box culvert extensions as Lump Sum. The Lump Sum unit price shall include all extensions at each identified box culvert, and shall not be measured as individual units per inlet or outlet. Except for the Foundation Preparation bid items listed, the Department will NOT measure Foundation Preparation for any other items of work and shall consider it incidental to the other items of work, as applicable.

F. Precast Box Culvert. The Department will measure Precast Box Culverts as Linear Feet.

G. Precast Box Culvert Headwalls. The Department will measure Precast Box Culvert Headwalls as Each.

Box Culvert Extensions
Page 6 of 6

H. Concrete-Class A. See Section 601.04.

I. Steel Reinforcement. See Section 602.04.

J. Clean Culvert. The Department will measure each box culvert cleaned as Lump Sum. The bid item Clean Culvert will not be measured when a box culvert must be cleaned due to buildup of debris, silt, etc. that occurs during the Contractor's construction operations.

V. PAYMENT.

The Department will make payment only for the bid items listed. All other items required to complete the construction shall be incidental to the listed bid items.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Erosion Control. See the Special Note for Erosion Control.

C. Foundation Preparation. Payment at the Lump Sum unit price shall be full compensation for furnishing all labor, materials, and equipment necessary for Foundation Preparation of all extensions at each identified box culvert.

D. Precast Box Culvert. Payment at the Liner Feet unit price shall be full compensation for furnishing all labor, materials, and equipment necessary for Precast Box Culvert.

E. Precast Box Culvert Headwalls. Payment at the Each unit price shall be full compensation for furnishing all labor, materials, and equipment necessary for Precast Box Culvert Headwalls.

F. Concrete-Class A. See Section 601.05.

G. Steel Reinforcement. See Section 602.04.

H. Clean Culvert. The Department will make payment for the completed and accepted quantities of each box culvert cleaned, as approved by the Engineer. Payment at the Lump Sum unit price shall be full compensation for furnishing all labor, materials, and equipment necessary to clean each box culvert measured for payment. Any box culverts that require cleaning, but are not approved by the Engineer for measurement of payment, shall be incidental to the box culvert bid items.

SPECIAL NOTE

For Potentially Contaminated Soils

Rowan County

PERFORM LOW COST SAFETY IMPROVEMENTS ON US 60 FROM MP 10.834 TO MP 17.112

Item No. 9-9008

Excavated soils that are found to be stained or have a petroleum odor shall remain on-site or shall be disposed at an off-site, approved and contained landfill. The contractor shall be HazMat certified or shall have a certified HazMat subcontractor perform this excavation and disposal. The contractor shall provide the disposal manifest to the engineer. Payment shall be incidental to roadway excavation.

If there are any questions regarding this note, please contact Danny Peake, Director, Division of Environmental Analysis, 200 Mero Street, Frankfort, KY 40601, Phone: (502) 564-7250.

SPECIAL NOTE FOR STAKING

Perform Contractor Staking according to Section 201; except, in addition to the requirements of Section 201, perform the following:

1. Contrary to Section 201, perform items 1-3 usually performed by the Engineer.
2. Using the proposed pavement superelevation rates, runout, and runoff lengths, determine the necessary changes in pavement edge elevation along the curves and the transitions leading into and out of the curve to achieve the proposed superelevation improvements. The intent is to provide a consistent superelevation throughout the curves and smooth transitions into and out of the curves. Once the proposed changes in pavement edge elevations are determined and prior to starting paving operations, verify the proposed roadside re-grading along the curve can be constructed so that the new roadside is flush with the new pavement edge elevation and the new toe of slope, or top of cut, will remain within the existing Right-of-Way and/or not impact a sensitive obstruction. If necessary, and with the approval of the Engineer, reduce the proposed superelevation rate of a curve if the new edge of pavement elevation will cause the new roadside grading to extend beyond the Right-of-Way and/or impact a sensitive obstruction. Alternatively, with the approval of the Engineer and to the extent allowable by the "Ditching & Shouldering and Embankment Benching Details" and/or the Special Note for Ditching & Shouldering, the Contractor may be allowed to make adjustments to the roadside grading so the proposed roadside re-grading will remain within the existing Right-of-Way and/or not impact a sensitive obstruction. After the final proposed changes in pavement edge elevations are determined and before paving operations begin, submit to the Engineer and obtain approval for the number of asphalt lifts, each asphalt lift's thickness, the asphalt mix type of each lift, the length and placement of any longitudinal edge keys, and any milling and texturing the contractor will use to achieve the superelevation improvement. Ensure positive drainage upon completion of the work.
3. Verify the dimensions, type, and quantities of the culvert pipes, entrance pipes, and/or box culverts as listed and detailed in the proposal, and determine flow line elevations and slopes necessary to provide positive drainage. Revise as necessary to accommodate the existing site conditions; to provide proper alignment of the drainage structures with existing and/or proposed ditches, stream channels, swales, and the roadway lines and grades; and to ensure positive drainage upon completion of the work.
4. Using stakes, paint marks on the pavement, mag nails, and/or any other means approved by the Engineer, the Contractor shall mark and/or stake the proposed sign locations in the field. NOTE: The proposed signs are listed in the proposal by approximate location and are NOT to be taken as the exact location for the signs. During staking operations the Contractor shall review the signing layout and existing field conditions and look for potential conflicts, including but not limited to utilities, driveways, visual obstructions, etc. When conflicts are found, adjust the staked location of signs to mitigate conflicts. Because the sign locations in the proposal are approximate and the location of some signs may need to be adjusted due to conflicts, during staking operations the Contractor shall

Staking
Page 2 of 2

refer to and utilize the information in the Manual on Uniform on Traffic Control Devices (MUTCD), current edition. The MUTCD cover items such as: appropriate sign location, advance placement distances, and spacing requirements for signing. The intent is for the proposed signs to be consistent with, and meet the requirements of, the MUTCD. Once the proposed sign locations have been staked, notify and coordinate with the District Traffic Engineer, and perform a review of the staked locations. Adjust the staked locations, as directed by the District Traffic Engineer and obtain approval of the final staked locations. This review will also be used to determine if there are any existing signs that require removal and/or relocation. Provide the District Traffic Engineer with 2 weeks of notice when a route will be ready for a review of the staked locations. NOTE: The District Traffic Engineer may determine that the proposed signing, including sign types and messages, needs to be adjusted and/or modified from what is shown in the proposal. Therefore, the Contractor shall not order any sign material for a route until the route has been staked and final sign location approval has been given by the District Traffic Engineer.

5. Produce and furnish to the Engineer "As Built" information for the superelevation improvements and the drainage improvements. For superelevation improvements, as built information will consist of a record of the final pavement cross slopes every 50 feet, for each lane of travel along the curves and the transitions into and out of the curves. Elevation data of the curve improvements is not necessary; simply the cross slope percentage every 50 feet. For the drainage improvements, as built information will consist of a final record of the actual types, sizes, and locations of the drainage structures (i.e. box inlets, headwalls, junction boxes, etc.), culvert pipes, and/or box culverts constructed. Final elevation data of the drainage improvements is not necessary.
6. Using paint marks on the pavement, and/or any other means approved by the Engineer, the Contractor shall layout and pre-mark the proposed striping, pavement markings, etc. Adjust as necessary to accommodate the existing site conditions and to provide proper alignment of the proposed thru and turning lanes. Obtain approval of the pre-marked layout from the Engineer and/or District Traffic Engineer prior to installing the striping and/or pavement markings.
7. Prior to incorporating into the work, obtain the Engineers approval of all revisions determined by the Contractor.
8. Perform any and all other staking operations required to control and construct the work.

SPECIAL NOTE FOR EROSION CONTROL

I. DESCRIPTION

Perform all erosion and water pollution control work in accordance with any other notes in the Proposal, the Department's Standard and Interim Supplemental Specifications, the Special Provisions and Special Notes, and the Standard and Sepia Drawings, current editions, or as directed by the Engineer. Section references are to the Standard Specifications. This work shall consist of:

(1) Developing and preparing a Best Management Practices Plan (BMP) tailored to suit the specific construction phasing for each site within the project; (2) Preparing the project site for construction, including locating, furnishing, installing, and maintaining temporary and/or permanent erosion and water pollution control measures as required by the BMP prior to beginning any earth disturbing activity on the project site; (3) Clearing and grubbing and removal of all obstructions as required for construction; (4) Removing all erosion control devices when no longer needed; (5) Restoring all disturbed areas as nearly as possible to their original condition; (6) Preparing seedbeds and permanently seeding all disturbed areas; (7) Providing a Kentucky Erosion Prevention and Sediment Control Program (KEPSC) qualified inspector; and (8) Performing any other work to prevent erosion and/or water pollution as specified by this contract, required by the BMP, or as directed by the Engineer.

II. MATERIALS

Furnish materials in accordance with these notes, the Standard Specifications and Interim Supplemental Specifications, applicable Special Provisions and Special Notes, and the Standard and Sepia Drawings, current editions. Provide for all materials to be sampled and tested in accordance with the Department's Sampling Manual. Unless directed otherwise by the Engineer, make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing.

III. CONSTRUCTION

Be advised, these Erosion Control Notes do not constitute a BMP plan for the project. Jointly with the Engineer, prepare a site specific BMP plan for each drainage area within the project in accordance with Section 213. Provide a unique BMP at each project site using good engineering practices taking into account existing site conditions, the type of work to be performed, the construction phasing, methods, and the techniques to be utilized to complete the work. Be responsible for all erosion prevention, sediment control, and water pollution prevention measures required by the BMP for each site. Represent and warrant compliance with the Clean Water Act (33 USC Section 1251 et seq.), the 404 Permit, the 401 Water Quality Certification, and applicable state and local government agency laws, regulations, rules, specifications, and permits. Contrary to Section 105.05, in case of discrepancy between these notes, the Standard Specifications, Interim Supplemental Specifications, Special Provisions and Special Notes, Standard and Sepia Drawings, and such state and local government agency requirements, adhere to the most restrictive requirement.

Erosion Control

Page 2 of 3

Conduct operations in such a manner as to minimize the amount of disturbed ground during each phase of the construction and limit the haul roads to the minimum required to perform the work. Preserve existing vegetation not required to be removed by the work or the contract. Seed and/or mulch disturbed areas at the earliest opportunity. Use silt fence, silt traps, temporary ditches, brush barriers, erosion control blankets, sodding, channel lining, and other erosion control measures in a timely manner as required by the BMP and as directed or approved by the Engineer. Prevent sediment laden water from leaving the project, entering an existing drainage structure, or entering a stream.

Provide for erosion control measures to be in place and functioning prior to any earth disturbance within a drainage area. Compute the volume and size of silt control devices necessary to control sediment during each phase of construction. All silt control devices shall be sized to retain a volume of 3,600 cubic feet per disturbed contributing acre. Remove sediment from silt traps before they become a maximum of ½ full. Maintain silt fence by removing accumulated trappings and/or replacing the geotextile fabric when it becomes clogged, damaged, or deteriorated, or when directed by the Engineer. Properly dispose of all materials trapped by erosion control devices at approved sites off the right of way obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.

As work progresses, add or remove erosion control measures as required by the BMP, applicable to the Contractor's project phasing, construction methods, and techniques. Update the volume calculations and modify the BMP as necessary throughout the duration of the project. Ensure that an updated BMP is kept on site and available for public inspection throughout the life of the project.

The required volume at each Silt Trap shall be computed based on the Up Gradient Contributing Areas that are disturbed and/or stabilized to the satisfaction of the Engineer. The required volume calculation for each Silt Trap shall be determined by the Contractor and verified by the Engineer. The required volume at each Silt Trap may be reduced by the following amounts:

- Up Gradient Areas not disturbed (acres)
- Up Gradient Areas that have been reclaimed and protected by Erosion Control Blanket or other ground protection material such as Temporary Mulch (acres)
- Up Gradient Areas that have been protected by Silt Fence (acres) – Areas protected by Silt Fence shall be computed at a maximum rate of 100 square feet per linear foot of Silt Fence
- Up Gradient Areas that have been protected by Silt Traps (acres)

The use of Temporary Mulch is encouraged.

Silt Trap Type B shall always be placed at the collection point prior to discharging into a Blue Line Stream or onto an adjacent Property Owner. Where overland flow exists, a Silt Fence or other filter devices may be used.

After all construction is complete, restore all disturbed areas in accordance with Section 212. Completely remove all temporary erosion control devices not required as part of the permanent erosion control from the construction site. Prior to removal, obtain the Engineer's concurrence of items to be removed. Grade the remaining exposed earth (both on and off the Right-of-Way) as nearly

Erosion Control
Page 3 of 3

as possible to its original condition, or as directed by the Engineer. Prepare the seed bed areas and sow all exposed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

IV. MEASUREMENT

The Department will measure the various erosion control items according to Section 212.04 and Section 213.04, as applicable.

V. BASIS OF PAYMENT

The Department will make payment for the various erosion control items according to Section 212.04 and Section 213.04, as applicable.

SPECIAL NOTES FOR PIPE REPLACEMENTS / EXTENSIONS

I. DESCRIPTION

Except as provided herein, perform all work in accordance with the Department's Standard Specifications, interim Supplemental Specifications, Standard and Sepia Drawings, and Special Notes and Special Provisions, current editions. Article references are to the Standard Specifications. This project shall consist of furnishing all labor, equipment, materials, and incidentals for the following:

(1) Maintaining and Controlling Traffic; (2) Constructing pipe replacements and/or pipe extensions; (3) Embankment and/or Excavation; (4) Erosion Control; and (6) Any other work as specified by this contract.

II. MATERIALS

Provide for sampling and testing of all materials in accordance with the Department's Sampling Manual. Make materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these notes.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Culvert Pipe. Furnish pipe meeting the requirements of Section 810. Select pipe for pH range Medium and minimum fill cover height according to the applicable Standard or Sepia Drawings, current editions. Verify maximum and minimum fill cover height required for new pipe prior to construction and obtain the Engineer's approval of the class or gauge of pipe and type of coating prior to delivering pipe to project. Furnish approved connecting bands or pipe anchors and toe walls.

C. Flowable Fill. Furnish Flowable Fill for Pipe Backfill per Section 601.03.03(B).

D. Erosion Control. See Special Note for Erosion Control.

III. CONSTRUCTION METHODS

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Erosion Control. See Special Note for Erosion Control.

C. Site Preparation. Be responsible for all site preparation including, but not limited to, saw cutting and removing pavement; clearing and grubbing; staking; incidental excavation and backfilling; common and solid rock excavation; embankment in place; removal of obstructions, or any other items; restoration of pavements, slopes, and all disturbed areas; final dressing and cleanup; and disposal of materials. Limit clearing and grubbing to the absolute minimum required to construct the drainage features. Perform all site preparation only as approved or directed by the Engineer.

Pipe Replacements/Extensions
Page 2 of 5

- D. Removing Headwalls, Pipe, and Excavation.** Remove existing headwalls and lengths of culvert and/or entrance pipes at the approximate locations noted on the summary. The Engineer will determine the exact locations and lengths of pipe to be removed at the time of construction. When removing pipe, or any portion of pipe under the roadway, saw cut the existing asphalt pavement and base to a neat edge prior to excavation and removal of the existing pipe. NOTE: Saw cutting the pavement shall be incidental. Obtain the Engineer's approval of trench width and/or saw cutting limits prior to saw cutting the pavement. Excavate the trench and remove the pipe as directed, or approved, by the Engineer without disturbing existing underground utilities.
- E. Constructing Pipe, Headwalls, and Drainage Boxes.** Construct culvert and/or entrance pipes, pipe extensions, headwalls, drainage boxes, and other drainage structures at the locations shown in the proposal or as designated by the Engineer. The contractor will establish, with the approval of the Engineer, the final centerlines, flow lines, and skews to obtain the best fit with the existing and/or proposed ditches and other proposed improvements. (See the Special Note for Staking.) Construct pipe bedding according to Section 701 and the applicable Standard or Sepia Drawings, current editions. Use approved connecting bands or concrete anchors as required. Prior to backfilling pipe, obtain the Engineer's approval of the pipe installation. Provide Positive drainage upon completion of pipe installation.
- F. Pipe Backfill.** Backfill entrance pipes according to Section 701.03.06. Contrary to Section 701.03.06, backfill culvert pipes with flowable fill for the width of the roadway and as shown on the Pipe Replacement Detail. Steel plates will likely be required to maintain traffic while the flowable fill cures. Once the flowable fill has sufficiently cured, place the Asphalt Base in lifts with thicknesses of 3-4 inches, up to the surface of the existing pavement. Seal with Leveling & Wedging. Allow the asphalt base and leveling & wedging to be exposed to traffic for a minimum of 14 days to allow for settlement. During the waiting period, level & wedge any settlement as directed by the Engineer. After the waiting period has been met for the last pipe replacement constructed, the final milling and/or surfacing operations can begin, unless directed otherwise by the Engineer.
- G. Embankments.** Backfill pipe and culvert extensions, and construct shoulder embankments as directed by the Engineer. The contractor shall bench into the existing slope and apply proper compaction according to Section 206. For more information and details on benching, refer to Note 2 on the detail sheet titled: DITCHING & SHOULDERING AND EMBANKMENT BENCHING DETAILS, found elsewhere in the Proposal. Provide positive drainage of ditches, shoulders, and slopes at all times during, and upon completion of construction.
- H. Property Damage.** Be responsible for all damage to public and/or private property resulting from the work. Repair or replace damaged roadway features in like kind materials and design, as directed by the Engineer at no additional cost to the Department. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner and the Engineer at no additional cost to the Department.

Pipe Replacements/Extensions
Page 3 of 5

- I. Coordination with Utility Companies.** Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs as a result of pipe replacement and pipe extension operations at no additional cost to the Department. NOTIFY THE ENGINEER AND THE UTILITY OWNER(S) IMMEDIATELY WHEN IT IS DISCOVERED OR ANTICIPATED THAT ANY UTILITY CONFLICT COULD DELAY THE CONTRACTOR'S OPERATIONS. If the total delay exceeds ten working days, an extension of the specified completion date will be negotiated with the Contractor for delay to the Contractor's work; however, no extension will be granted for any delay caused by the Contractor's failure to notify the Engineer and/or the utility company as specified above when a conflict is discovered or anticipated as specified.
- J. Right-of-Way Limits.** The Department has not established exact limits of the Right-of-Way. Unless a consent and release form is obtained from the adjoining property owner, limit work activities to the obvious Right-of-Way and staging areas secured by the Contractor at no additional cost to the Department. In the event that private improvements (i.e. fences, buildings, etc.) encroach upon the Right-of-Way, the contractor shall notify the Engineer and limit work activities in order to NOT disturb the improvements. If they become necessary, the Department will secure consent and releases from property owners through the Engineer. Be responsible for all encroachments onto private lands.
- K. Clean Up, Disposal of Waste.** Clean up the project area as work progresses. Dispose of all removed concrete, pipe, pavement, debris, excess and unsuitable excavation, and all other waste at approved sites off the Right of Way obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.
- L. Final Dressing, Seeding and Protection.** Grade all disturbed areas to blend with the adjacent roadways features and to provide a suitable seed bed. Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.
- M. Erosion Control.** See the Special Note for Erosion Control.

IV. METHOD OF MEASUREMENT

- A. Maintain and Control Traffic.** See the Traffic Control Plan.
- B. Site Preparation.** Other than the bid items listed, site preparation will NOT be measured for payment, but shall be incidental to culvert and/or entrance pipe bid items, as applicable.

Pipe Replacements/Extensions
Page 4 of 5

- C. Remove Headwall.** The Department will measure the removal of existing headwalls as Each. Any excavation, including rock excavation, necessary to remove existing headwalls will NOT be measured for payment, but shall be incidental to the bid item "Remove Headwall".
- D. Remove Pipe.** Removal of existing culvert and entrance pipe shall be measured according to Section 701.04.14. Any excavation, including rock excavation, necessary to remove existing pipe will NOT be measured for payment, but shall be incidental to the bid item "Remove Pipe".
- E. Culvert and Entrance Pipe.** The Department will measure the quantities according to Section 701.04. Any excavation, including rock excavation, necessary to install culvert or entrance pipe shall be incidental to the corresponding pipe bid items.
- F. Headwalls, Drainage Boxes.** The Department will measure according to Section 710. Any excavation, including rock excavation, necessary to construct headwalls and/or drainage boxes will NOT be measured for payment, but shall be incidental to the applicable bid item.
- G. Excavation, Pipe Backfill, Embankments.** The Department will NOT measure for payment the following items: any excavation, including rock excavation, necessary to remove the existing pipe and/or install the proposed culvert or entrance pipe, pipe backfill material, flowable fill, and re-constructing shoulder embankments, but shall considered these items incidental to the bid items for culvert and entrance pipe.
- H. Clean Up, Disposal of Waste, Final Dressing, Seeding and Protection.** The Department will NOT measure for payment the following activities: Clean Up, Disposal of Waste, and Final Dressing. These activities shall be incidental to the project bid items. Seeding and Protection shall be measured according to Section 212.
- I. Erosion Control.** See the Special Note for Erosion Control.

V. BASIS OF PAYMENT

- A. Maintain and Control Traffic.** See the Traffic Control Plan.
- B. Remove Headwall.** The Department will make payment for the completed and accepted quantities of Each headwall removed. Payment at the Contract unit price per Each shall be full compensation for furnishing all labor, materials, equipment, and incidentals for removing the existing headwall.
- C. Remove Pipe.** The Department will make payment according to Section 701.05. Payment at the Contract unit price per linear foot shall be full compensation for furnishing all labor, materials, equipment, and incidentals for removing the existing pipe.
- D. Culvert and Entrance Pipe.** The Department will make payment according to Section

Pipe Replacements/Extensions
Page 5 of 5

701.05. Payment at the Contract unit price per linear foot shall be full compensation for furnishing all labor, materials, equipment, and incidentals necessary for installing and backfilling new culvert and entrance pipe.

E. Headwalls, Drainage Boxes. The Department will make payment according to Section 710.

F. Erosion Control. See the Special Note for Erosion Control.

SPECIAL NOTE FOR SIGNAGE

The final advisory speeds and some sign types will have to be determined after the curve superelevation improvements and final surfacing operations have been completed. The Contractor shall notify the Engineer and District Traffic Engineer when all of the superelevation improvements and surfacing operations have been completed. Once notified, the District Traffic Engineer will ball-bank the newly surfaced route to determine the appropriate advisory speeds and work with the Contractor to determine the final Signing Plan. The Engineer and/or District Traffic Engineer will provide the Contractor with the final advisory speeds, any changes to proposed sign types, and the final quantities within three (3) weeks of being notified by the Contractor that final surfacing operations are complete. After the Contractor has received this information from the Engineer and/or the District Traffic Engineer, the Contractor shall then proceed to layout and stake the signing according to the Special Note for Staking, included elsewhere in this proposal.

All sign sheeting shall be from the Cabinet's List of Approved Materials.

The following signs and sign components shall be fabricated using Type XI sheeting:

- White sign legends on panel signs
- STOP (R1-1) signs
- ALL WAY (R1-3P) signs
- YIELD (R1-2) signs
- DO NOT ENTER (R5-1) signs
- WRONG WAY (R5-1a) signs

The following signs and sign components shall be fabricated using Type XI fluorescent yellow sheeting:

- Horizontal Alignment Signs and Plaques, including signs shown in Figure 2C-1 of the MUTCD
- All Advisory Speed (W13-1P) plaques

The following signs shall be fabricated using Type XI fluorescent yellow-green sheeting:

- School and school bus warning signs, including the fluorescent yellow-green signs shown in Figures 7B-1 and 7B-6 of the MUTCD and other school-related warning signs that are not included in the MUTCD.
- Bicycle Warning (W11-1) signs and SHARE THE ROAD (W16-1P) plaques or diagonal downward point arrow (W16-7P) plaques that supplement Bicycle Warning signs.
- In-Street Pedestrian Crossing (R1-6) signs and Overhead pedestrian Crossing (R1-9) signs
- Supplemental plaques to any of the previously listed signs

All other permanent signs shall be fabricated using Type XI sheeting.

SPECIAL NOTE FOR SIGNING

I. DESCRIPTION

Except as provided herein, this work shall be performed in accordance with the current edition of the Manual on Uniform Traffic Control Devices (MUTCD), the Department's current Standard Specifications and Interim Supplemental Specifications, applicable Standard and Sepia Drawings, and applicable Special Provisions. Article references are to the Standard Specifications. This project shall consist of furnishing all labor, equipment, materials, and incidentals for the following:

(1) Maintaining and Controlling Traffic; (2) Furnish, Fabricate, and Erect Signs; and (3) All other work specified in the Contract.

II. MATERIALS

All materials shall be sampled and tested in accordance with the Department's Sampling Manual and the materials shall be available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these Notes.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Erosion Control. See Special Note for Erosion Control.

III. CONSTRUCTION METHODS

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Site Preparation. Be responsible for all site preparation including, but not limited to: clearing and grubbing, staking, excavation, backfill, and removal of obstructions or any other material not covered by other items. Perform all site preparation only as approved, or directed, by the Engineer.

C. Staking. See Special Note for Staking.

D. Signs and Posts. Before beginning installation, the Contractor shall furnish to the Engineer drawings, descriptions, manufacturer's cuts, etc. covering all material to be used. Mill test reports for beams, steel panels, and each different gauge of aluminum or steel sheeting used must be submitted to the Division of Construction and approved prior to erection.

Fabricate sheet signs from .080 or .125 gauge aluminum alloy 5052-H38 or 6061-T6, in accordance with ASTM B-209, and to the size and shape specified. Prepare the side of

Signing

Page 2 of 6

the sheet to be used as the sign face to receive the retroreflective background material according to the recommendations of the sheeting and retroreflective material manufacturer(s). Sheeting used as background material for sign faces is to be the color specified and visually in accordance with the standard requirements of ASTM D-4956, and meet the requirements of Section 830 of the Standard Specifications. Contrary to Section 830.02.06, only the types and colors of sheeting as specified in the proposal will be accepted. All retroreflective material shall be fabricated and assembled in accordance with the specifications and/or recommendations of the manufacturer(s).

All hardware for the erection of sheeting signs shall be rust resistant: stainless steel, zinc coated, aluminum, or an Engineer approved material. All beams and posts shall be of sufficient lengths to extend from the top of the sign to the required embedment in the anchor. Splicing of the sign post shall NOT be allowed. For installations in soil, Type I steel posts shall be mounted on either a standard anchor, with soil stabilizer plate, or on a Type D breakaway sign support. Refer to Sheeting Sign Detail Sheet 1 of 2 for installation details for a standard anchor with soil stabilizer plate. When installing a standard anchor with soil stabilizer plate, if solid rock is encountered, the Contractor shall drill a hole to the required depth into the rock, install the anchor into the hole, and backfill the anchor post with concrete, or other method approved by the Engineer. The cost shall be incidental to Type I steel post, and a soil stabilizer plate will not be required. Refer to Standard Drawing RGX-065, current edition, for installation details of Type D breakaway sign supports. Approved manufacturers for Type D breakaway sign supports have been placed on the list of approved materials. For installations on existing concrete, such as a sidewalk, concrete median, etc., Type I steel posts shall be mounted on a Type D surface mount. For Type D surface mounts use only Kleen Break Model 425 for Surface Mount Concrete Installations by Xcessories Squared of Auburn, IL. Prior to installation, the Contractor shall submit to the Engineer shop drawings of the Type D surface mount(s). Install the Type D surface mount(s) according to all the applicable requirements of the manufacturer (see shop drawings). All steel post shall meet the requirements of Section 832. All hardware including, but not limited to, sign post anchors, soil stabilizer plates, nuts, bolts, washers, fasteners, fittings, and bracing, or any other incidentals necessary to erect the signs shall be furnished by the Contractor and will be incidental to the work.

New concrete bases, posts, support anchors, signs, etc. are to be installed prior to dismantling any existing sign(s). The removal of existing signs, posts, and support anchors is to be performed concurrently with the installation of new signs, posts, and support anchors, under the same lane closure during the same work shift. Completely remove existing sign support anchors or remove them to a minimum depth of six (6) inches below existing ground line and backfill the disturbed area to the existing ground line.

When listed in the summaries, Reflective Sign Post Panels shall be 2" wide x 60" tall (or 84" tall for urban installations) and shall have three 3/8" holes (one hole in the top 3",

Signing

Page 3 of 6

one hole near the center, and one hole in the bottom 3”) that align with the holes on the Type I steel post. Sheeting for the Reflective Sign Post Panels shall be the same Type and color as the sign installed on the post. Examples include:

- Red, fluorescent yellow, and fluorescent yellow-green (Type XI Sheeting)
- White and yellow (Type XI Sheeting).

All manufactured sheeting signs shall be free of visual defects including, but not limited to: cracks, tears, ridges, humps, discoloration, etc., and defective signs shall be replaced at no additional cost to the Department.

All sign blanks shall be hole punched by the manufacturer for either horizontal or vertical installation. Attach all aluminum sheeting signs to square post with 3/8” all steel rivets and nylon washers.

Post will be attached to the anchor with 5/16” corner bolts and 5/16” flanged nuts, and all post and anchor cuts shall be treated with a Cold Galvanizing Compound spray.

Sign posts shall be erected vertically by using a bubble level. The tolerance shall be a two (2) degree angle in any direction. For locations where there are more than one sign is mounted beside each other, the posts shall be spaced to provide approximately six inches (6”) of spacing between signs.

E. Property Damage. The Contractor shall be responsible for all damage to public and/or private property resulting from the Contractor’s activities. Repair or replace damaged roadway features in like kind materials and design as directed by the Engineer at no additional cost to the Department. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner and the Engineer at no additional cost to the Department.

F. Coordination with Utility Companies. Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs due to the Contractor’s operations at no additional cost to the Department. NOTIFY THE ENGINEER AND THE UTILITY OWNER(S) IMMEDIATELY WHEN IT IS DISCOVERED OR ANTICIPATED THAT ANY UTILITY CONFLICT COULD DELAY THE CONTRACTOR’S OPERATIONS. If the total delay exceeds ten working days, an extension of the specified completion date will be negotiated with the Contractor for delay to the Contractor's work; however, no extension will be granted for any delay

Signing
Page 4 of 6

caused by the Contractor's failure to notify the Engineer and/or the utility company as specified above when a conflict is discovered or anticipated as specified.

G. Caution. The information in this proposal and the type of work listed herein are approximate only and are not to be taken as an exact evaluation of the materials and conditions to be encountered during construction; the bidder must draw his/her own conclusions when developing the Unit Bid Prices for each bid item. As such, if the conditions encountered are not in accordance with the information shown, the Department does not guarantee any changes to the Unit Bid Prices nor extension of the contract will be considered. The Department will pay for bid item quantity overruns, but only if pre-approved by the Engineer.

H. Control. Perform all work under the absolute control of the Department. Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces, and to permit public utility companies and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with such other work will be reduced to a minimum. The Department will not honor any claims for money or time extension created by the operations of such other parties.

Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the Department's work in general harmony and in a satisfactory manner, and the Engineer's decision shall be final and binding upon the Contractor.

I. Clean Up, Disposal of Waste. Clean up the project area as work progresses. Dispose of all removed concrete, debris, and other waste as per Section 204.03.08. The Department will incur no cost to obtain the disposal sites. The Department will NOT make direct payment for disposal of waste and debris from the project. Existing anchors, signs, posts, and any other hardware or material removed from the site are to become the property of the Contractor. See Special Provision for Waste and Borrow Sites.

J. Final Dressing, Seeding and Protection. Grade all disturbed areas to blend with the adjacent roadways features and to provide a suitable seed bed. Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

K. Erosion Control. See Special Note for Erosion Control.

IV. METHOD OF MEASUREMENT

Signing
Page 5 of 6

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Site Preparation.** Other than the bid items listed, the Department will NOT measure Site Preparation for payment, but shall be incidental to the project bid items.
- C. Signs.** The Department will measure the finished in-place area of signs in Square Feet.
- D. Sign Posts.** The Department will measure the finished in-place length of sign posts in Linear Feet, from the top of the anchor, or top of the sign support, to the top of the sign post. Laps, cutoffs, excess, and waste will NOT be measured for payment.
- E. Type D Breakaway Sign Supports.** The Department will measure Type D sign supports as Each support installed.
- F. Type D Surface Mounts.** The Department will measure Type D Surface Mounts as Each surface mount installed.
- G. Class A Concrete for Signs.** The Department will measure the Class A Concrete used in conjunction with Type D breakaway sign support installations in Cubic Yards. Any concrete that is required as backfill due to hitting rock during a standard installation shall be incidental to the bid item STEEL POST TYPE I, and soil stabilizers will not be required.
- H. Clean Up, Disposal of Waste, Final Dressing, Seeding and Protection.** The Department will NOT measure for payment the following activities: Clean Up, Disposal of Waste, and Final Dressing. These activities shall be incidental. Seeding and Protection shall be measured according to Section 212.
- I. Erosion Control.** See Special Note for Erosion Control.
- J. Remove Sign.** The Department will consider all signs attached to one or more connected posts as a single sign. The Department will measure as Each sign assembly removed and NOT each individual sign removed.
- K. Items Provided by KYTC.** The Department will NOT measure for payment the installation of signs and/or surface mounts provided by KYTC. These activities shall be incidental to the bid item STEEL POST TYPE I.

V. BASIS OF PAYMENT

- A. Maintain and Control Traffic.** See Traffic Control Plan.

Signing
Page 6 of 6

- B. Signs.** The Department will make payment for the completed and accepted quantities under the bid item SBM ALUM SHEET SIGNS .125 IN or .080 IN. The Department will consider payment full compensation for all work and incidentals necessary to install the signs, as required by these notes and the details found elsewhere in the proposal, at the locations indicated on the summary sheets, plans, and/or as directed by the Engineer.
- C. Sign Posts.** The Department will make payment for the completed and accepted quantities under the bid item STEEL POST TYPE I. The Department will consider payment full compensation for all work and incidentals necessary to install the sign posts as required by these notes and the details found elsewhere in the proposal.
- D. Type D Breakaway Sign Supports.** The Department will make payment for the completed and accepted quantities under the bid item GMSS TYPE D. The Department will consider payment full compensation for all work and incidentals necessary to install the Type D breakaway sign supports as required by Standard Drawing RGX-065, current edition.
- E. Type D Surface Mounts.** The Department will make payment for the completed and accepted quantities under the bid item GMSS TYPE D Surface Mount. The Department will consider payment full compensation for all work and incidentals necessary to install the Type D surface mounts according to all applicable manufacturer requirements.
NOTE: There are two permissible Type D Surface Mount alternatives: Kleen Break Model 425 for Surface Mount Concrete Installations by Xcessories Squared of Auburn, IL
- F. Class A Concrete for Signs.** The Department will make payment for the completed and accepted quantities, used in conjunction with Type D breakaway sign support installations, under the bid item CLASS A CONCRETE FOR SIGNS. The Department will consider payment full compensation for all work and incidentals necessary to install the concrete as required by Standard Drawing RGX-065, current edition.
- G. Remove Sign.** The Department will make payment for the completed and accepted quantities under the bid item REMOVE SIGN. The Department will consider payment full compensation for all work and incidentals necessary to remove the existing signs, posts, anchors, and any other sign material or hardware, from the locations indicated on the summary sheets, plans, and/or as directed by the Engineer.
- H. Erosion Control.** See Special Note for Erosion Control.

SPECIAL NOTES FOR COMPLETION DATES & LIQUIDATED DAMAGES

The ultimate fixed completion date for this project will be **September 30, 2021**. Liquidated Damages for failure to complete the project on time will be assessed following Section 108.09.

In addition to the requirements of Section 108.09, the Department will assess Liquidated Damages in the amount of **\$1,000** per hour for each hour, or fraction of an hour, for any and all road closures that are in place beyond the time frame(s) noted in the Traffic Control Plan and approved by the Engineer.

Contrary to Section 108.09, Liquidated Damages will be assessed for the months of December through March.

Contrary to Section 108.09, Liquidated Damages will be assessed regardless of whether seasonal limitations prohibit the Contractor from performing work on the controlling operation.

All liquidated damages will be applied accumulatively.

All other applicable portions of Section 108 apply.

SPECIAL PROVISION FOR WASTE AND BORROW SITES

Obtain U.S. Army Corps of Engineer's approval before utilizing a waste or borrow site that involves "Waters of the United States". The Corps of Engineers defines "Waters of the United States" as perennial or intermittent streams, ponds or wetlands. The Corps of Engineers also considers ephemeral streams, typically dry except during rainfall but having a defined drainage channel, to be jurisdictional waters. Direct questions concerning any potential impacts to "Waters of the United States" to the attention of the appropriate District Office for the Corps of Engineers for a determination prior to disturbance. Be responsible for any fees associated with obtaining approval for waste and borrow sites from the U.S. Army Corps of Engineer or other appropriate regulatory agencies.

1-296 Waste & Borrow Sites
01/02/2012

COORDINATION OF WORK WITH OTHER CONTRACTS

Be advised, there may be an active project(s) adjacent to or within this project. The Engineer will coordinate the work of the Contractors. See Section 105.06.

1-3193 Coordination Contracts
01/02/2012

SPECIAL NOTE FOR DOUBLE ASPHALT SEAL COAT

Use RS-2 or RS-2C asphalt material that is compatible with the seal aggregate. Apply the first course of asphalt seal coat at the rate of 3.2 lbs/sy of asphalt and 30 lbs/sy of size #78 seal coat aggregate. Apply the second course at 2.8 lbs/sy of asphalt and 20 lbs/sy of size #9M seal coat aggregate. The Engineer may adjust the rate of application as conditions warrant. Use caution in applying liquid asphalt material to avoid over spray getting on curbs, gutter, barrier walls, bridges, guardrail, and other roadway appurtenances.

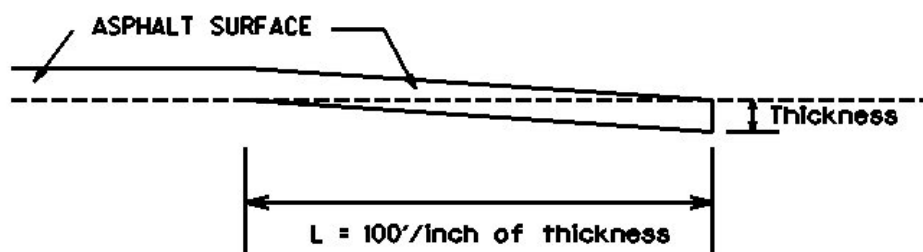
The Department will not measure any surface preparation required prior to applying the asphalt seal coat, but shall be incidental to “Asphalt Material for Asphalt Seal Coat”.

1-3215 Double Asphalt Seal Coat
01/02/2012

SPECIAL NOTE FOR EDGE KEY

Construct Edge Keys at the beginning of project, end of project, at railroad crossings, and at ramps, as applicable. Unless specified in the Contract or directed by the Engineer, do not construct edge keys at intersecting streets, roads, alleys, or entrances. Cut out the existing asphalt surface to the required depth and width shown on the drawing and heel the new surface into the existing surface. The Department will make payment for this work at the Contract unit price per ton for Asphalt Pavement Milling and Texturing, which shall be full compensation for all labor, materials, equipment, and incidentals for removal and disposal of the existing asphalt surface required to construct the edge key.

EDGE KEY



Thickness = 1.0 Inches

L = 100 LF

L = Length of Edge Key

1-3309 Edge key by Ton
01/02//2012

SPECIAL NOTES FOR GUARDRAIL

I. DESCRIPTION

Except as specified herein, perform all work in accordance with the Department's Standard and Supplemental Specifications, Special Notes and Special Provisions, and the Standard and Sepia Drawings, current editions. Article references are to the Standard Specifications.

Furnish all equipment, labor, materials, and incidentals for the following work items:

(1) Site preparation; (2) Remove existing guardrail systems; (3) Construct Guardrail, End Treatments, Bridge End Connectors, and Terminal Sections, as applicable; (4) Delineators for guardrail; (5) Maintain and Control Traffic; and (6) all other work specified as part of this contract.

II. MATERIALS

Except as specified herein, provide for all materials to be sampled and tested in accordance with the Department's Sampling Manual and make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing.

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Guardrail.** Furnish guardrail system components according to Section 814 and the Standard and Sepia Drawings; except use steel posts only, no alternates.
- C. Delineators for Guardrail.** Furnish white and/or yellow Delineators for Guardrail according to Standard Drawing RBR-055 – Delineators for Guardrail, current edition.
- D. Erosion Control.** See the Special Note for Erosion Control.

III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Site Preparation.** Remove existing guardrail system, including the guardrail end treatments, Bridge End connectors and all other elements of the existing guardrail system as per Section 719, except that the Contractor will take possession of all concrete posts and all concrete associated with the existing bridge and/or guardrail end treatments. Locate all disposal areas off the Right of Way. Be responsible for all site preparation, including but not limited to, clearing and grubbing, excavation, embankment, and removal of all obstructions or any other items; regrading, reshaping, adding and compacting of suitable materials on the existing shoulders to provide proper template or foundation for the guardrail;

Guardrail
Page 2 of 3

filling voids left as the result of removing existing guardrail and guard posts with dry sand; temporary pollution and erosion control; disposal of excess, waste materials, and debris; and final dressing, cleanup, and seeding and protection. Perform all site preparation as approved or directed by the engineer.

- C. Guardrail.** Except as specified herein, construct guardrail system according to Section 719 and the Standard and Sepia Drawings, current editions. Locations listed on the summary and/or shown on the drawings are approximate only. The Engineer will determine the exact termini for individual guardrail installations at the time of construction. Unless directed otherwise by the Engineer, provide a minimum two (2) foot shoulder width. Construct radii at entrances and road intersections as directed by the Engineer.

Erect guardrail to the lines and grades shown on the current Standard and Sepia Drawings, or as directed by the Engineer by any method approved by the Engineer which allows construction of the guardrail to the true grade without apparent sags.

When removing existing guardrail and installing new guardrail, do not leave the blunt end exposed where it would be hazardous to the public. When it is not practical to complete the construction of the guardrail and the permanent end treatments and terminal sections first, provide a temporary end by connecting at least 25 feet of rail to the last post, and by slightly flaring, and burying the end of the rail completely into the existing shoulder. If left overnight, place a drum with bridge panel in advance of the guardrail end and maintain during use.

- D. Delineators for Guardrail.** Construct Delineators for Guardrail according to Standard Drawing RBR-055 – Delineators for Guardrail, current edition.
- E. Property Damage.** Be responsible for all damage to public and/or private property resulting from the work. Restore damaged roadway features and private property at no additional cost to the Department.
- F. Coordination with Utility Companies.** Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require utilities to be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs as a result of guardrail operations at no additional cost to the Department.
- G. Right of Way Limits.** The Department has not established the exact limits of the Right-of-Way. Limit work activities to obvious Right-of-Way, permanent or temporary easements, and work areas secured by the Department through consent and release of the adjacent property owners. Be responsible for all encroachments onto private lands.

Guardrail
Page 3 of 3

- H. Clean Up, Disposal of Waste.** Dispose of all removed concrete, debris, and other waste and debris off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.
- I. Final Dressing, Seeding and Protection.** Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.
- J. Erosion Control.** See the Special Note for Erosion Control.

IV. METHOD OF MEASUREMENT

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Site preparation.** Other than the bid items listed, the Department will not measure Site Preparation for separate payment but shall be incidental to the Guardrail, End Treatments, Bridge End Connectors, and Terminal Sections, as applicable.
- C. Guardrail, End Treatments, Bridge End Connectors, Terminal Sections, and Remove Guardrail.** The Department will measure according to Section 719.04.
- D. Delineators for Guardrail.** See Standard Drawing RBR-055 – Delineators for Guardrail.
- E. Clean Up, Disposal of Waste, Final Dressing, and Seeding and Protection.** The Department will NOT measure for payment the operations of: Clean Up, Disposal of Waste, and Final Dressing. These activities shall be incidental. Seeding and Protection will be measured according to Section 212.
- F. Erosion Control.** See the Special Note for Erosion Control.

V. BASIS OF PAYMENT

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Guardrail, End Treatments, Bridge End Connectors, Terminal Sections, and Remove Guardrail.** The Department will make payment according to Section 719.05.
- C. Delineators for Guardrail.** See Standard Drawing RBR-055 – Delineators for Guardrail.
- D. Erosion Control.** See the Special Note for Erosion Control.

**SPECIAL NOTE FOR
ASPHALT MILLING AND TEXTURING**

Begin paving operations within **48 hours** of commencement of the milling operation. Continue paving operations continuously until completed. If paving operations are not begun within this time period, the Department will assess liquidated damages at the rate prescribed by Section 108.09 until such time as paving operations are begun.

Take possession of the millings and recycle the millings or dispose of the millings off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department.

1-3520 48 hours Contractor keeps millings
01/2/2012

SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

Consider the dimensions shown on the typical sections for pavement and shoulder widths and thickness' to be nominal or typical dimensions. The Engineer may direct or approve varying the actual dimensions to be constructed to fit existing conditions. Do not widen existing pavement or shoulders unless specified elsewhere in this proposal or directed by the engineer.

1-3725 Typical Section Dimensions
01/02/2012

**TRAFFIC CONTROL PLAN
ROWAN COUNTY
US 60
ITEM NO. 9-9008.00**

TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the current editions of the Manual on Uniform Traffic Control Devices (MUTCD), Standard Specifications, and the Standard and Sepia Drawings. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to “Maintain and Control Traffic”.

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition, at the beginning of the work and maintained in like new condition until completion of the work. Any temporary traffic control items, devices, materials, and incidentals shall remain the property of the contractor unless otherwise addressed, when no longer needed.

PROJECT PHASING & CONSTRUCTION PROCEDURES

The US 60 corridor from MP 10.834 to MP 17.112 is a two-lane rural roadway with a wide range of proposed improvement options. Due to US 60 being an official detour route for I-64 traffic, as well as the high number of residents and businesses along the route, full closure of the roadway should be avoided whenever possible and would require approval by the Engineer. The following proposed improvements are isolated to one side of the roadway, and can be constructed by a standard single lane closure:

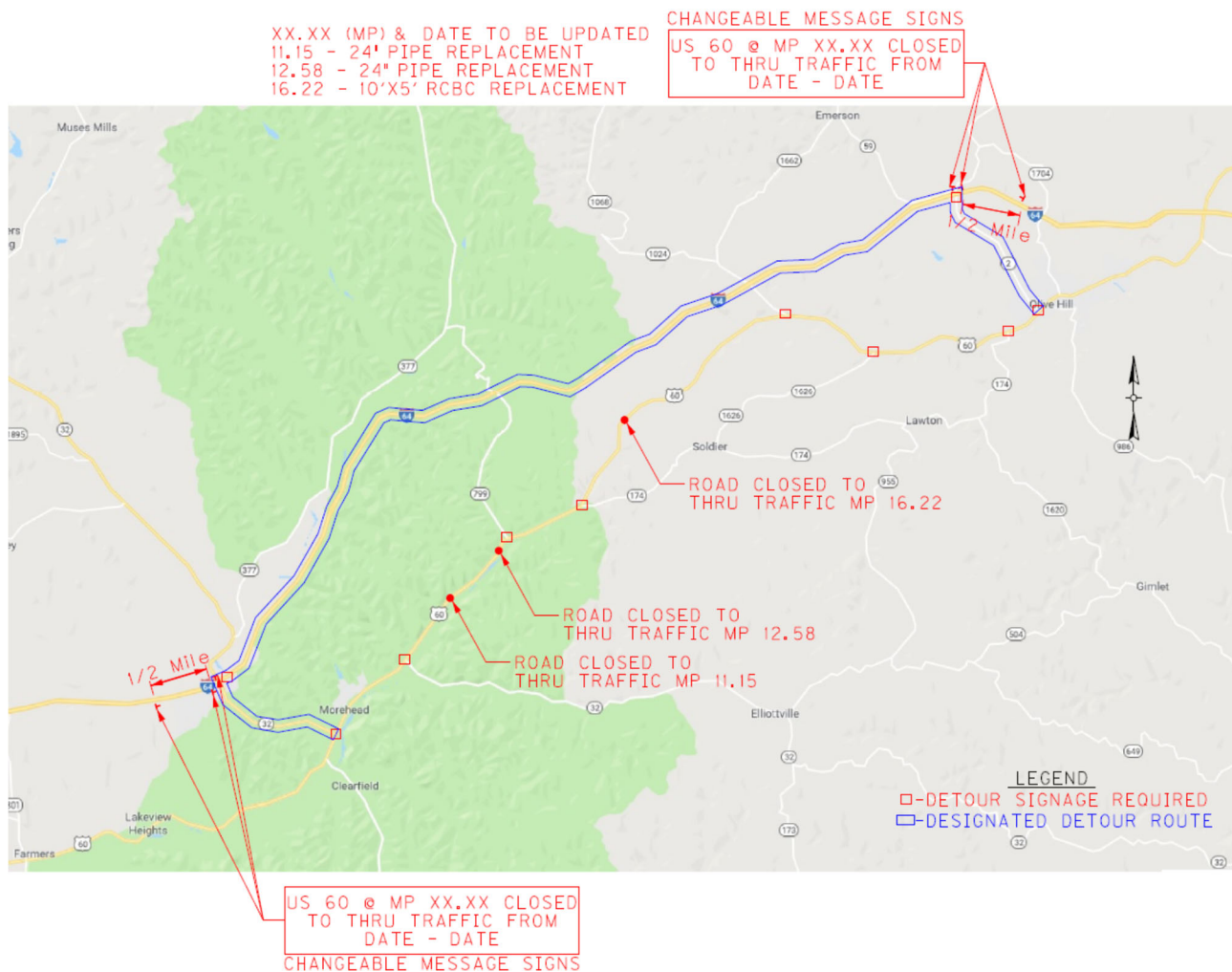
- Elevate and/or Widen Shoulder
- Remove or Replace Existing Guardrail
- Install New Guardrail Outside of Widened Shoulder
- Construct New Side Slopes and/or Ditch
- Extend Existing Cross Pipe

These improvements shall adhere to KYTC standard drawing TTC-100-04, which utilizes 2 flaggers, one in each direction, to direct the movement of traffic around the work zone.

The remainder of the proposed improvements can also be constructed utilizing standard single lane closures as shown in TTC-100-04, however, they will affect both sides of the roadway. In these cases, the work will be done on one side of the roadway, pavement will be placed as necessary, and then the lane closure and traffic will be flipped to the opposite sides of the roadway to complete the construction. These proposed improvements include:

- Replace Existing Cross Pipe or Culvert (except as noted)
- Modify Superelevation
- Re-Surface Roadway

Proposed improvements that warrant consideration of a full road closure are the installation of the new skewed 10’X5’ pre-cast concrete box culvert at MP 16.22, and the replacement of existing crossing pipes at MP 11.15 and MP 12.58. When a full closure of US 60 is required, I-64 will be the designated, signed detour route and changeable message signs along I-64 at the locations shown will be used for advanced warning notification in case there is a crash on I-64 while US 60 is closed.



For all other construction activities, utilize a lane closure, and maintain alternating one-way traffic. This may require part-width construction of certain elements. Provide a minimum clear lane width of 10 feet; however, provide for passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus or emergency vehicle on an official run arrives on the scene, make provisions for the passage of the school bus or emergency vehicle as quickly as possible.

No lane closures will be allowed on the following dates:

- | | |
|--------------------------|--|
| Independence Day Weekend | Friday, July 3, 2020 – Sunday, July 5, 2020 |
| Labor Day Weekend | Friday, September 4, 2020 – Monday, September 7, 2020 |
| Thanksgiving Weekend | Wednesday, November 25, 2020 – Monday, November 30, 2020 |
| Christmas and New Year’s | Thursday, December 24, 2020 – Sunday, January 3, 2021 |
| Easter Weekend | Friday, April 2, 2021 – Sunday, April 4, 2021 |

Memorial Day Weekend	Friday, May 28, 2021 – Monday, May 31, 2021
Independence Day Weekend	Friday, July 2, 2021 – Monday, July 5, 2021
Labor Day Weekend	Friday, September 10, 2021 – Monday, September 6, 2021
Poppy Mountain Festival	As determined by the Engineer
Harvest Festival	As determined by the Engineer
MSU Events	As determined by the Engineer

At the discretion of the Engineer, additional days and hours may be specified when lane closures will not be allowed due to unforeseen events.

LANE CLOSURES

Do not leave lane closures in place during non-working hours or prohibited periods, unless otherwise approved by the Engineer. No long-term lane closures (more than 3 days) will be allowed; therefore, lane closures will not be measured for payment.

SIGNS

Sign posts and splices shall be compliant with NCHRP 350 or MASH. Manufacturer’s documentation validating this compliance shall be provided to the Engineer prior to installation. Signs, including any splices, shall be installed according to manufacturer’s specifications and installation recommendations. Contrary to section 112.04.02, only long-term signs (signs intended to be continuously in place for more than 3 days) will be measured for payment. Short-term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

CHANGEABLE MESSAGE SIGNS

Provide changeable message signs at locations determined by the Engineer. The Engineer may vary the designated locations as the work progresses. The Engineer will determine the messages to be displayed. In the event of damage or mechanical/electrical failure, repair or replace the Changeable Message Sign within 24 hours. The Department will measure for payment the maximum number of Changeable Message Signs in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual Changeable Message Signs only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure for payment any replacements for damaged Changeable Message Signs or any changeable message signs the Engineer directs to be replaced due to poor condition or readability. Retain possession of the Changeable Message Signs upon completion of the work.

BARRICADES

The Department will not measure barricades used in lieu of barrels and cones for channelization or delineation, but shall be incidental to Maintain and Control Traffic according to Section 112.04.01.

The Department will measure barricades used for road closures and to protect pavement removal areas in individual units Each. The Department will measure for payment the maximum number of barricades in concurrent use at the same time on a single day on all sections of the contract. The Department will

measure individual barricades only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure for payment any replacements for damaged barricades, or any barricades the Engineer directs to be replaced due to poor condition or reflectivity. Retain possession of the Barricades upon completion of construction.

TEMPORARY ENTRANCES

The Engineer will not require the Contractor to provide continuous access to farms, single family, duplex, or triplex residential properties during working hours; however, provide reasonable egress and ingress to each such property when actual operations are not in progress at that location. Limit the time during which a farm or residential entrance is blocked to the minimum length of time required for actual operations, not extended for the Contractor's convenience, and in no case exceeding six (6) hours. Notify all residents twenty-four hours in advance of any driveway or entrance closings and make any accommodations necessary to meet the access needs of disabled residents.

Except as allowed by the Phasing as specified above, maintain direct access to all side streets and roads, schools, churches, commercial properties, and apartments or apartment complexes of four or more units at all times. Access to fire hydrants must also be maintained at all times

The Department will measure asphalt materials required to construct and maintain any temporary entrances which may be necessary to provide temporary access; however, the Department will not measure aggregates, excavation, and/or embankment, but shall be incidental to Maintain and Control Traffic. The Engineer will determine the type of surfacing material, asphalt or aggregate, to be used at each entrance.

PAVEMENT MARKINGS

If there is to be a deviation from the existing striping plan, the Engineer will furnish the Contractor a striping plan prior to placement of the final surface course. Install Temporary Striping according to Section 112 with the following exception:

If the Contractor's operations or phasing requires temporary markings that must subsequently be removed from the final surface course, use an approved removable lane tape; however, the Department will not measure removable lane tape for separate payment, but will measure and pay for removable lane tape as temporary striping.

PAVEMENT EDGE DROP-OFFS

Do not allow a pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation with an elevation difference greater than 1½". Place Warning signs (MUTCD W8-11 or W8-9A) in advance of and at 1500' intervals throughout the drop-off area. Dual post the signs on both sides of the traveled way. Wedge all transverse transitions between resurfaced and un-resurfaced areas which traffic may cross with asphalt mixture for leveling and wedging. Remove the wedges prior to placement of the final surface course.

Protect pavement edges that traffic is not expected to cross, except accidentally, as follows:

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. During daylight working hours only, the Engineer will allow the Contractor to use cones in lieu of plastic drums, panels, and barricades. Wedge the drop-off with DGA or asphalt mixture for leveling and wedging with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours, when work is not active in the drop-off area.

Greater than 4" - Protect drop-offs greater than 4 inches within 10 feet of traffic by placing drums, vertical panels, or barricades every 25 feet. The Engineer will not allow the use of cones in lieu of drums, vertical panels, or barricades for drop-offs greater than 4". Place Type III Barricades directly in front of the drop-off facing oncoming traffic in both directions of travel. Provide warning signs as shown on the Standard Drawings or as directed by the Engineer

Pedestrians & Bicycles - Protect pedestrian and bicycle traffic as directed by the Engineer.

USE AND PLACEMENT OF CHANGEABLE MESSAGE SIGNS

The following policy is based upon current Changeable Message Signs (CMS) standards and practice from many sources, including the Federal Highway Administration (FHWA), other State Departments of Transportation, and Traffic Safety Associations. It is understood that each CMS installation or use requires individual consideration due to the specific location or purpose. However, there will be elements that are constant in nearly all applications. Accordingly, these recommended guidelines bring a level of uniformity, while still being open to regional experience and engineering judgment.

Application

The primary purpose of CMS is to advise the driver of unexpected traffic and routing situations. Examples of applications where CMS can be effective include:

- Closures (road, lane, bridge, ramp, shoulder, interstate)
- Changes in alignment or surface conditions
- Significant delays, congestion
- Construction/maintenance activities (delays, future activities)
- Detours/alternative routes
- Special events with traffic and safety implications
- Crash/incidents
- Vehicle restrictions (width, height, weight, flammable)
- Advance notice of new traffic control devices
- Real-time traffic conditions (must be kept up to date)
- Weather /driving conditions, environmental conditions, Roadway Weather Information Systems
- Emergency Situations
- Referral to Highway Advisory Radio (if available)
- Messages as approved by the County Engineer's Office

CMS should not be used for:

- Replacement of static signs (e.g. road work ahead), regulatory signage (e.g. speed limits), pavement markings, standard traffic control devices, conventional warning or guide signs.
- Replacement of lighted arrow board
- Advertising (Don't advertise the event unless clarifying "action" to be taken by driver – e.g. Speedway traffic next exit)
- Generic messages
- Test messages (portable signs only)
- Describe recurrent congestion (e.g. rush hour)
- Public service announcements (not traffic related)

Messages

Basic principles that are important to providing proper messages and insuring the proper operation of a CMS are:

- Visible for at least ½ mile under ideal daytime and nighttime conditions
- Legible from all lanes a minimum of 650 feet
- Entire message readable twice while traveling at the posted speed
- No more than two message panels should be used (three panels may be used on roadways where vehicles are traveling less than 45 mph). A panel is the message that fits on the face of the sign without flipping or scrolling.
- Each panel should convey a single thought; short and concise
- Do not use two unrelated panels on a sign
- Do not use the sign for two unrelated messages
- Should not scroll text horizontally or vertically
- Should not contain both the words left and right
- Use standardized abbreviations and messages
- Should be accurate and timely
- Avoid filler/unnecessary words and periods (hazardous, a, an, the)
- Avoid use of speed limits
- Use words (not numbers) for dates

Placement

Placement of the CMS is important to ensure that the sign is visible to the driver and provides ample time to take any necessary action. Some of the following principles may only be applicable to controlled access roadways. The basic principles of placement for a CMS are:

- When 2 signs are needed, place on same side of roadway and at least 1,000 feet apart
- Place behind semi-rigid/rigid protection (guardrail, barrier) or outside of the clear zone
- Place 1,000 feet in advance of work zone; at least one mile ahead of decision point
- Normally place on right side of roadway; but should be placed closest to the affected lane so that either side is acceptable
- Signs should not be dual mounted (one on each side of roadway facing same direction)
- Point trailer hitch downstream
- Secure to immovable object to prevent theft (if necessary)
- Do not place in sags or just beyond crest
- Check for reflection of sun to prevent the blinding of motorist
- Should be turned ~3 degrees outward from perpendicular to the edge of pavement
- Bottom of sign should be 7 feet above the elevation of edge of roadway
- Should be removed when not in use

Standard Abbreviations

The following is a list of standard abbreviations to be used on CMS:

<u>Word</u>	<u>Abbrev</u>	<u>Example</u>
Access	ACCS	ACCIDENT AHEAD/ USE ACCS RD NEXT RIGHT
Alternate	ALT	ACCIDENT AHEAD/ USE ALT RTE NEXT RIGHT
Avenue	AVE	FIFTH AVE CLOSED/ DETOUR NEXT LEFT
Blocked	BLKD	FIFTH AVE BLKD/ MERGE LEFT
Boulevard	BLVD	MAIN BLVD CLOSED/ USE ALT RTE
Bridge	BRDG	SMITH BRDG CLOSED/ USE ALT RTE
Cardinal Directions	N, S, E, W	N I75 CLOSED/ DETOUR EXIT 30
Center	CNTR	CNTR LANE CLOSED/ MERGE LEFT
Commercial	COMM	OVRSZ COMM VEH/ USE I275
Condition	COND	ICY COND POSSIBLE
Congested	CONG	HVY CONG NEXT 3 MI
Construction	CONST	CONST WORK AHEAD/ EXPECT DELAYS
Downtown	DWNTN	DWNTN TRAF USE EX 40
Eastbound	E-BND	E-BND I64 CLOSED/ DETOUR EXIT 20
Emergency	EMER	EMER VEH AHEAD/ PREPARE TO STOP
Entrance, Enter	EX, EXT	DWNTN TRAF USE EX 40
Expressway	EXPWY	WTRSN EXPWY CLOSED/ DETOUR EXIT 10
Freeway	FRWY, FWY	GN SYNDR FWY CLOSED/ DETOUR EXIT 15
Hazardous Materials	HAZMAT	HAZMAT IN ROADWAY/ ALL TRAF EXIT 25
Highway	HWY	ACCIDENT ON AA HWY/ EXPECT DELAYS
Hour	HR	ACCIDENT ON AA HWY/ 2 HR DELAY
Information	INFO	TRAF INFO TUNE TO 1240 AM
Interstate	I	E-BND I64 CLOSED/ DETOUR EXIT 20
Lane	LN	LN CLOSED MERGE LEFT
Left	LFT	LANE CLOSED MERGE LFT
Local	LOC	LOC TRAF USE ALT RTE
Maintenance	MAINT	MAINT WRK ON BRDG/ SLOW
Major	MAJ	MAJ DELAYS I75/ USE ALT RTE
Mile	MI	ACCIDENT 3 MI AHEAD/ USE ALT RTE
Minor	MNR	ACCIDENT 3 MI MNR DELAY
Minutes	MIN	ACCIDENT 3 MI/ 30 MIN DELAY
Northbound	N-BND	N-BND I75 CLOSED/ DETOUR EXIT 50
Oversized	OVRSZ	OVRSZ COMM VEH/ USE I275 NEXT RIGHT
Parking	PKING	EVENT PKING NEXT RGT
Parkway	PKWY	CUM PKWAY TRAF/ DETOUR EXIT 60
Prepare	PREP	ACCIDENT 3 MI/ PREP TO STOP
Right	RGT	EVENT PKING NEXT RGT
Road	RD	HAZMAT IN RD/ ALL TRAF EXIT 25
Roadwork	RDWK	RDWK NEXT 4 MI/ POSSIBLE DELAYS
Route	RTE	MAJ DELAYS I75/ USE ALT RTE
Shoulder	SHLDR	SHLDR CLOSED NEXT 5 MI
Slippery	SLIP	SLIP COND POSSIBLE/ SLOW SPD
Southbound	S-BND	S-BND I75 CLOSED/ DETOUR EXIT 50
Speed	SPD	SLIP COND POSSIBLE/ SLOW SPD

Standard Abbreviations (cont)

<u>Word</u>	<u>Abbrev</u>	<u>Example</u>
Street	ST	MAIN ST CLOSED/ USE ALT RTE
Traffic	TRAF	CUM PKWAY TRAF/ DETOUR EXIT 60
Vehicle	VEH	OVRSZ COMM VEH/ USE I275 NEXT RIGHT
Westbound	W-BND	W-BND I64 CLOSED/ DETOUR EXIT 50
Work	WRK	CONST WRK 2MI/ POSSIBLE DELAYS

Certain abbreviations are prone to inviting confusion because another word is abbreviated or could be abbreviated in the same way. DO NO USE THESE ABBREVIATIONS:

<u>Abbrev</u>	<u>Intended Word</u>	<u>Word Erroneously Given</u>
ACC	Accident	Access (Road)
CLRS	Clears	Colors
DLY	Delay	Daily
FDR	Feeder	Federal
L	Left	Lane (merge)
LOC	Local	Location
LT	Light (traffic)	Left
PARK	Parking	Park
POLL	Pollution (index)	Poll
RED	Reduce	Red
STAD	Stadium	Standard
TEMP	Temporary	Temperature
WRNG	Warning	Wrong

Typical Messages

The following is a list of typical messages used on CMS. The list consists of the reason or problem that you want the driver to be aware of and the action that you want the driver to take.

<u>Reason/Problem</u>	<u>Action</u>
ACCIDENT	ALL TRAFFIC EXIT RT
ACCIDENT/XX MILES	AVOID DELAY USE XX
XX ROAD CLOSED	CONSIDER ALT ROUTE
XX EXIT CLOSED	DETOUR
BRIDGE CLOSED	DETOUR XX MILES
BRIDGE/(SLIPPERY, ICE, ETC.)	DO NOT PASS
CENTER/LANE/CLOSED	EXPECT DELAYS
DELAY(S), MAJOR/DELAYS	FOLLOW ALT ROUTE
DEBRIS AHEAD	KEEP LEFT
DENSE FOG	KEEP RIGHT
DISABLED/VEHICLE	MERGE XX MILES
EMER/VEHICLES/ONLY	MERGE LEFT
EVENT PARKING	MERGE RIGHT
EXIT XX CLOSED	ONE-WAY TRAFFIC
FLAGGER XX MILES	PASS TO LEFT
FOG XX MILES	PASS TO RIGHT

Typical Messages (cont)

Reason/Problem

FREEWAY CLOSED
FRESH OIL
HAZMAT SPILL
ICE
INCIDENT AHEAD
LANES (NARROW, SHIFT, MERGE, ETC.)
LEFT LANE CLOSED
LEFT LANE NARROWS
LEFT 2 LANES CLOSED
LEFT SHOULDER CLOSED
LOOSE GRAVEL
MEDIAN WORK XX MILES
MOVING WORK ZONE, WORKERS IN ROADWAY
NEXT EXIT CLOSED
NO OVERSIZED LOADS
NO PASSING
NO SHOULDER
ONE LANE BRIDGE
PEOPLE CROSSING
RAMP CLOSED
RAMP (SLIPPERY, ICE, ETC.)
RIGHT LANE CLOSED
RIGHT LANE NARROWS
RIGHT SHOULDER CLOSED
ROAD CLOSED
ROAD CLOSED XX MILES
ROAD (SLIPPERY, ICE, ETC.)
ROAD WORK
ROAD WORK (OR CONSTRUCTION) (TONIGHT, TODAY, TOMORROW, DATE)
ROAD WORK XX MILES
SHOULDER (SLIPPERY, ICE, SOFT, BLOCKED, ETC.)
NEW SIGNAL XX MILES
SLOW 1 (OR 2) - WAY TRAFFIC
SOFT SHOULDER
STALLED VEHICLES AHEAD
TRAFFIC BACKUP
TRAFFIC SLOWS
TRUCK CROSSING
TRUCKS ENTERING
TOW TRUCK AHEAD
UNEVEN LANES
WATER ON ROAD
WET PAINT
WORK ZONE XX MILES
WORKERS AHEAD

Action

PREPARE TO STOP
REDUCE SPEED
SLOW
SLOW DOWN
STAY IN LANE
STOP AHEAD
STOP XX MILES
TUNE RADIO 1610 AM
USE NN ROAD
USE CENTER LANE
USE DETOUR ROUTE
USE LEFT TURN LANE
USE NEXT EXIT
USE RIGHT LANE
WATCH FOR FLAGGER

DURABLE PAVEMENT EDGE DETAIL

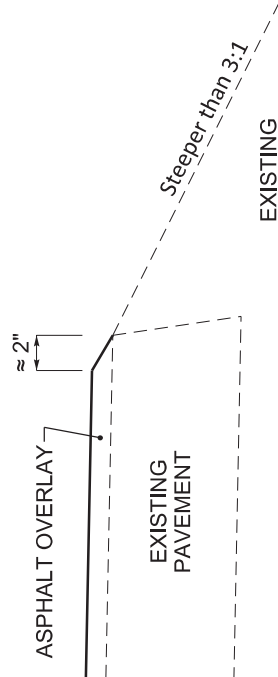
(Resurfacing adjacent to fill slope or ditch foreslope that is 3:1 or less)



PREPARE SHOULDER ACCORDING TO STANDARD SPECIFICATIONS

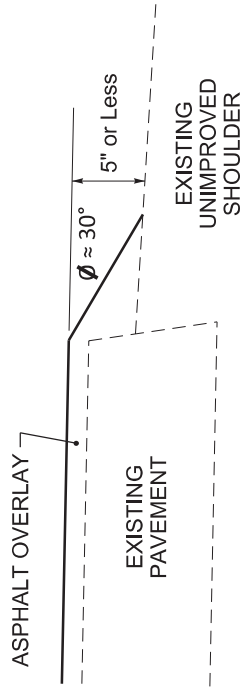
DURABLE PAVEMENT EDGE DETAIL

(Resurfacing adjacent to fill slope or ditch foreslope that is steeper than 3:1)



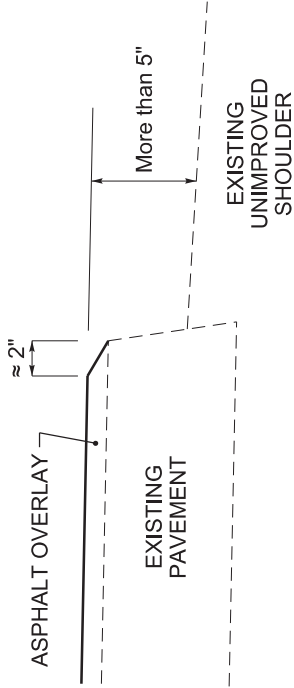
DURABLE PAVEMENT EDGE DETAIL

(Resurfacing adjacent to low shoulder with dropoff of 5 inches or less)



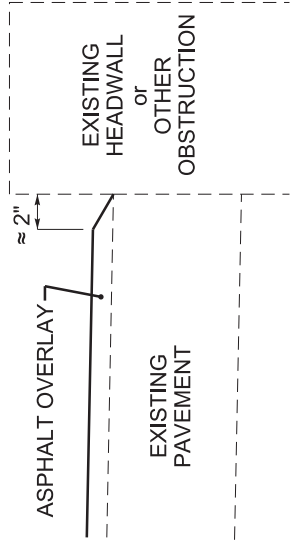
DURABLE PAVEMENT EDGE DETAIL

(Resurfacing adjacent to low shoulder with dropoff of more than 5 inches)



DURABLE PAVEMENT EDGE DETAIL

(Resurfacing adjacent to an obstruction, such as an existing headwall)



NOTES

1. DETAILS DO NOT APPLY TO OVERLAYS LESS THAN 1 INCH THICK.
2. THE DURABLE PAVEMENT EDGE DEVICE MAY BE DISENGAGED AT DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT, AS APPROVED BY THE ENGINEER.

DRAWING NOT TO SCALE

DURABLE PAVEMENT EDGE DETAILS

	KENTUCKY TRANSPORTATION CABINET Department of Highways DIVISION OF RIGHT OF WAY & UTILITIES	TC 62-226 Rev. 01/2016 Page 1 of 1
RIGHT OF WAY CERTIFICATION		

<input checked="" type="checkbox"/> Original	<input type="checkbox"/> Re-Certification	RIGHT OF WAY CERTIFICATION	
ITEM #	COUNTY	PROJECT # (STATE)	PROJECT # (FEDERAL)
09-9008.00	Rowan	12FO FD52 103 9359901D	HSIP 5211118

PROJECT DESCRIPTION

Perform low cost safety improvements on US 60 From MP 10.834 to MP 17.112

No Additional Right of Way Required

Construction will be within the limits of the existing right of way. The right of way was acquired in accordance to FHWA regulations under the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970, as amended. No additional right of way or relocation assistance were required for this project.

Condition # 1 (Additional Right of Way Required and Cleared)

All necessary right of way, including control of access rights when applicable, have been acquired including legal and physical possession. Trial or appeal of cases may be pending in court but legal possession has been obtained. There may be some improvements remaining on the right-of-way, but all occupants have vacated the lands and improvements, and KYTC has physical possession and the rights to remove, salvage, or demolish all improvements and enter on all land. Just Compensation has been paid or deposited with the court. All relocations have been relocated to decent, safe, and sanitary housing or that KYTC has made available to displaced persons adequate replacement housing in accordance with the provisions of the current FHWA directive.

Condition # 2 (Additional Right of Way Required with Exception)



The right of way has not been fully acquired, the right to occupy and to use all rights-of-way required for the proper execution of the project has been acquired. Some parcels may be pending in court and on other parcels full legal possession has not been obtained, but right of entry has been obtained, the occupants of all lands and improvements have vacated, and KYTC has physical possession and right to remove, salvage, or demolish all improvements. Just Compensation has been paid or deposited with the court for most parcels. Just Compensation for all pending parcels will be paid or deposited with the court prior to AWARD of construction contract

Condition # 3 (Additional Right of Way Required with Exception)

The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. All remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. KYTC is hereby requesting authorization to advertise this project for bids and to proceed with bid letting even though the necessary right of way will not be fully acquired, and/or some occupants will not be relocated, and/or the just compensation will not be paid or deposited with the court for some parcels until after bid letting. KYTC will fully meet all the requirements outlined in 23 CFR 635.309(c)(3) and 49 CFR 24.102(j) and will expedite completion of all acquisitions, relocations, and full payments after bid letting and prior to AWARD of the construction contract or force account construction.

Total Number of Parcels on Project	EXCEPTION (S) Parcel #	ANTICIPATED DATE OF POSSESSION WITH EXPLANATION
Number of Parcels That Have Been Acquired		
Signed Deed		
Condemnation		
Signed ROE		

Notes/ Comments (Use Additional Sheet if necessary)

LPA RW Project Manager		Right of Way Supervisor	
Printed Name		Printed Name	James R. Mason
Signature		Signature	 Digitally signed by James R. Mason Date: 2019.09.26 08:44:34 -04'00'
Date		Date	
Right of Way Director		FHWA	
Printed Name		Printed Name	
Signature	 Digitally signed by DM Loy Date: 2019.09.26 09:33:15 -04'00'	Signature	No Signature Required as per FHWA-KYTC Current Stewardship Agreement
Date		Date	

UTILITIES AND RAIL CERTIFICATION NOTE

Rowan County - HSIP 5211 (118)
FD52 103 0060 010-018
Perform Low Cost Safety Improvements on US 60 from MP
10.834-17.112
Item No. 9-9008.00

GENERAL PROJECT NOTE ON UTILITY PROTECTION

Utility coordination efforts determined that utility relocation work is required to complete the project. Any work pertaining to these utility facilities is defined in the bid package and is to be carried out as instructed by the Kentucky Transportation Cabinet. The contractor will be responsible for any coordination or adjustments that are discussed or quantified in the proposal.

NOTE: DO NOT DISTURB THE FOLLOWING UTILITIES LOCATED WITHIN THE PROJECT DISTURB LIMITS

- **Water Mains**
A 6" Asbestos Water Main is located on the north side of US 60 from the beginning of the project to Sta. 663+20, then crosses to the south side of US 60 where it ends at Sta. 700+00. An 8" PVC water main is located on the south side of US 60 from the beginning of the project up to Sta. 606+50 where it ties into the pump station on the north side of the road. A 10" PVC water main crosses US 60 at Sta. 609+00 coming from the water pump station and runs along the south side up to Sta. 704+50 where it crosses to the north side of US 60 and runs to Sta. 750+00. An 8" PVC water main begins on the south side of US 60 at Sta. 700+00 and crosses US 60 to the north side just before Sta. 746+00, then crosses back to the south side at Sta. 788+20 before crossing back to the north side at Sta. 837+50 and runs to the project end. Specific relocations to the 6" Asbestos Water Main are detailed below.

- **Electric Poles**
Overhead electric/telephone is located on both north and south sides throughout the project limits. Specific pole relocations (telephone) are detailed below.

The Contractor is fully responsible for protection of all utilities listed above

THE FOLLOWING COMPANIES ARE RELOCATING/ADJUSTING THEIR UTILITIES WITHIN THE PROJECT LIMITS AND WILL BE COMPLETE PRIOR TO CONSTRUCTION

N/A

THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE COMPANY OR THE COMPANY'S SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT

The Department will consider submission of a bid as the Contractor's agreement to not make any claims for additional compensation due to delays or other conditions created by the operations of LG&E Kentucky Utilities. Working days will not be charged for those days on which work on LG&E Kentucky Utilities facilities is delayed, as provided in the current edition of the KY Standard Specifications for Road and Bridge Construction. Should a

UTILITIES AND RAIL CERTIFICATION NOTE

Rowan County - HSIP 5211 (118)
FD52 103 0060 010-018
Perform Low Cost Safety Improvements on US 60 from MP
10.834-17.112
Item No. 9-9008.00

difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to the project, the KYTC Resident Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the Department's work in general harmony and in a satisfactory manner, and his decision shall be final and binding upon the Contractor.

THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE ROAD CONTRACTOR AS INCLUDED IN THIS CONTRACT

Rowan Water 6" Asbestos Water Main relocations:

- Lt. Sta. 581+40 to Sta. 582+00-W MAIN POINT RELOCATE
- Lt. Sta. 588+42 to Sta. 590+66-W MAIN POINT RELOCATE, W SERVICE SHORT SIDE and W PIPE 6"
- Lt. Approximate Sta. 593+50-W VALVE
- Lt. Sta. 610+33 to Sta. 610+93-W MAIN POINT RELOCATE and W SERVICE SHORT SIDE
- Lt. Approximate Sta. 614+50-W PIPE 6", W SERVICE SHORT SIDE and W VALVE
- Lt. Sta. 615+49 to Sta. 615+79-W MAIN POINT RELOCATE
- Lt. Sta. 623+69 to Sta. 624+29-W MAIN POINT RELOCATE and W PIPE 6"
- Lt. Sta. 628+92 to Sta. 629+52-W MAIN POINT RELOCATE
- Lt. Approximate Sta. 631+00-W SERVICE SHORT SIDE and W VALVE

All work on Rowan Water facilities will follow their specifications as provided in the proposal documentation. All water valves and services shall be field located and approved by the engineer. All water services will be 1" CTS poly pipe.

THE FOLLOWING RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED

- No Rail Involved** **Minimal Rail Involved (See Below)** **Rail Involved (See Below)**

UTILITIES AND RAIL CERTIFICATION NOTE

Rowan County - HSIP 5211 (118)
FD52 103 0060 010-018
Perform Low Cost Safety Improvements on US 60 from MP
10.834-17.112
Item No. 9-9008.00

UNDERGROUND FACILITY DAMAGE PROTECTION – BEFORE YOU DIG

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. The contractor is instructed to contact KY 811 for the location of existing underground utilities. Contact shall be made a minimum of two (2) and no more than ten (10) business days prior to excavation.

The contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY 811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom are to be contacted through their individual Protection Notification Center. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area. Non-compliance with these directives can result in the enforcement of penalties.

SPECIAL CAUTION NOTE – PROTECTION OF UTILITIES

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs.

The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor's responsibility to verify all utilities and their respective locations before excavating.

Please Note: The information presented in this Utility Note is informational in nature and the information contained herein is not guaranteed.

UTILITIES AND RAIL CERTIFICATION NOTE

Rowan County - HSIP 5211 (118)
FD52 103 0060 010-018
Perform Low Cost Safety Improvements on US 60 from MP
10.834-17.112
Item No. 9-9008.00

AREA UTILITIES CONTACT LIST

<u>Utility Company/Agency</u>	<u>Contact Name</u>	<u>Contact Information</u>
1. Rowan County Water	Ronnie Crisp	(606) 784-9818 1765 Christy Creek Morehead, KY 40351
2. LG&E Kentucky Utilities	Chris Mays Matt Raymer	(800) 981-0600 215 Wall Street Maysville, KY 41056

NOTE: The Utilities Contact List is provided as informational only, and may not be a complete list of all Utility Companies with facilities in the project area.

KYTC BMP Plan for Project CID 20-4117



Kentucky Transportation Cabinet

Highway District 9

And

_____ **(2), Construction**

**Kentucky Pollutant Discharge Elimination System
Permit KYR10
Best Management Practices (BMP) plan**

Groundwater protection plan

For Highway Construction Activities

For

**Highway Safety Improvement Project on US 60 in
Rowan County**

Project: CID 20-4117

KPDES BMP Plan Page 1 of 14

Revised 3/4/2016

KYTC BMP Plan for Project CID 20-4117

Project information

Note – (1) = Design (2) = Construction (3) = Contractor

1. Owner – Kentucky Transportation Cabinet, District 9
2. Resident Engineer: (2)
3. Contractor name: (2)
Address: (2)

Phone number: (2)
Contact: (2)
Contractors agent responsible for compliance with the KPDES permit requirements (3):
4. Project Control Number: (2)
5. Route (Address): US 60
6. Latitude/Longitude (project mid-point): 38° 14' 20", -83° 21' 15"
7. County (project mid-point): Rowan
8. Project start date (date work will begin): (2)
9. Projected completion date: (2)

KYTC BMP Plan for Project CID 20-4117

A. Site description:

1. Nature of Construction Activity (from letting project description): Asphalt Pavement, Drainage Improvements, Roadway Rehab
2. Order of major soil disturbing activities: (2) and (3)
3. This project does not involve significant cut and fill.
4. Estimate of total project area (acres): 45.6
5. Estimate of area to be disturbed (acres): 11.9
6. Post construction runoff coefficient will be included in the project drainage folder. Persons needing information pertaining to the runoff coefficient will contact the resident engineer to request this information.
7. Data describing existing soil condition: (1) & (2)
8. Data describing existing discharge water quality (if any): (1) & (2)
9. Receiving water name: Triplett Creek & Hays Branch
10. TMDLs and Pollutants of Concern in Receiving Waters: No TDML's were involved on this project.
11. Site map – Project layout sheet plus the erosion control sheets in the project plans that depict Disturbed Drainage Areas (DDAs) and related information. These sheets depict the existing project conditions with areas delineated by DDA (drainage area bounded by watershed breaks and right of way limits), the storm water discharge locations (either as a point discharge or as overland flow) and the areas that drain to each discharge point. These plans define the limits of areas to be disturbed and the location of control measures. Controls will be either site specific as designated by the designer or will be annotated by the contractor and resident engineer before disturbance commences. The project layout sheet shows the surface waters and wetlands.
12. Potential sources of pollutants:

The primary source of pollutants is solids that are mobilized during storm events. Other sources of pollutants include oil/fuel/grease from servicing and operating construction equipment, concrete washout water, sanitary wastes and trash/debris. (3)

KYTC BMP Plan for Project CID 20-4117

B. Sediment and Erosion Control Measures:

1. Plans for highway construction projects will include erosion control sheets that depict Disturbed Drainage Areas (DDAs) and related information. These plan sheets will show the existing project conditions with areas delineated by DDA within the right of way limits, the discharge points and the areas that drain to each discharge point. Project managers and designers will analyze the DDAs and identify Best Management Practices (BMPs) that are site specific. The balance of the BMPs for the project will be listed in the bid documents for selection and use by the contractor on the project with approval by the resident engineer.

Projects that do not have DDAs annotated on the erosion control sheets will employ the same concepts for development and managing BMP plans.

2. Following award of the contract, the contractor and resident engineer will annotate the erosion control sheets showing location and type of BMPs for each of the DDAs that will be disturbed at the outset of the project. This annotation will be accompanied by an order of work that reflects the order or sequence of major soil moving activities. The remaining DDAs are to be designated as "Do Not Disturb" until the contractor and resident engineer prepare the plan for BMPs to be employed. The initial BMP's shall be for the first phase (generally Clearing and Grubbing) and shall be modified as needed as the project changes phases. The BMP Plan will be modified to reflect disturbance in additional DDA's as the work progresses. All DDA's will have adequate BMP's in place before being disturbed.
3. As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:
 - Construction Access – This is the first land-disturbing activity. As soon as construction begins, bare areas will be stabilized with gravel and temporary mulch and/or vegetation.
 - At the beginning of the project, all DDAs for the project will be inspected for areas that are a source of storm water pollutants. Areas that are a source of pollutants will receive appropriate cover or BMPs to arrest the introduction of pollutants into storm water. Areas that have not been opened by the contractor will be inspected periodically (once per month) to determine if there is a need to employ BMPs to keep pollutants from entering storm water.
 - Clearing and Grubbing – The following BMP's will be considered and used where appropriate.

KYTC BMP Plan for Project CID 20-4117

- Leaving areas undisturbed when possible.
- Silt basins to provide silt volume for large areas.
- Silt Traps Type A for small areas.
- Silt Traps Type C in front of existing pipes and drop inlets which are to be saved
- Diversion ditches to catch sheet runoff and carry it to basins or traps or to divert it around areas to be disturbed.
- Brush and/or other barriers to slow and/or divert runoff.
- Silt fences to catch sheet runoff on short slopes. For longer slopes, multiple rows of silt fence may be considered.
- Temporary Mulch for areas which are not feasible for the fore mentioned types of protections.
- Non-standard or innovative methods.
- Cut & Fill and placement of drainage structures - The BMP Plan will be modified to show additional BMP's such as:
 - Silt Traps Type B in ditches and/or drainways as they are completed
 - Silt Traps Type C in front of pipes and drop inlets after they are placed
 - Channel Lining
 - Erosion Control Blanket
 - Temporary mulch and/or seeding for areas where construction activities will be ceased for 21 days or more.
 - Non-standard or innovative methods
- Profile and X-Section in place – The BMP Plan will be modified to show elimination of BMP's which had to be removed and the addition of new BMP's as the roadway was shaped. Probably changes include:
 - Silt Trap Type A, Brush and/or other barriers, Temporary Mulch, and any other BMP which had to be removed for final grading to take place.
 - Additional Silt Traps Type B and Type C to be placed as final drainage patterns are put in place.
 - Additional Channel Lining and/or Erosion Control Blanket.
 - Temporary Mulch for areas where Permanent Seeding and Protection cannot be done within 21 days.
 - Special BMP's such as Karst Policy
- Finish Work (Paving, Seeding, Protect, etc.) – A final BMP Plan will result from modifications during this phase of construction. Probable changes include:
 - Removal of Silt Traps Type B from ditches and drainways if they are protected with other BMP's which are sufficient to control erosion, i.e. Erosion Control Blanket or Permanent Seeding and Protection on moderate grades.
 - Permanent Seeding and Protection

KYTC BMP Plan for Project CID 20-4117

- Placing Sod
- Planting trees and/or shrubs where they are included in the project
- BMP's including Storm Water Management Devices such as velocity dissipation devices and Karst policy BMP's to be installed during construction to control the pollutants in storm water discharges that will occur after construction has been completed are: This project does not include storm water BMPs or flow controls for post-construction use.

C. Other Control Measures

1. No solid materials, including building materials, shall be discharged to waters of the commonwealth, except as authorized by a Section 404 permit.
2. Waste Materials

All waste materials that may leach pollutants (paint and paint containers, caulk tubes, oil/grease containers, liquids of any kind, soluble materials, etc.) will be collected and stored in appropriate covered waste containers. Waste containers shall be removed from the project site on a sufficiently frequent basis as to not allow wastes to become a source of pollution. All personnel will be instructed regarding the correct procedure for waste disposal. Wastes will be disposed in accordance with appropriate regulations. Notices stating these practices will be posted in the office.

3. Hazardous Waste

All hazardous waste materials will be managed and disposed of in the manner specified by local or state regulation. The contractor shall notify the Section Engineer if there any hazardous wastes being generated at the project site and how these wastes are being managed. Site personnel will be instructed with regard to proper storage and handling of hazardous wastes when required. The Transportation Cabinet will file for generator, registration when appropriate, with the Division of Waste Management and advise the contractor regarding waste management requirements.

4. Spill Prevention

The following material management practices will be used to reduce the risk of spills or other exposure of materials and substances to the weather and/or runoff.

- **Good Housekeeping:**

KYTC BMP Plan for Project CID 20-4117

The following good housekeeping practices will be followed onsite during the construction project.

- An effort will be made to store only enough product required to do the job
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure
- Products will be kept in their original containers with the original manufacturer's label
- Substances will not be mixed with one another unless recommended by the manufacturer
- Whenever possible, all of the product will be used up before disposing of the container
- Manufacturers' recommendations for proper use and disposal will be followed
- The site contractor will inspect daily to ensure proper use and disposal of materials onsite

➤ **Hazardous Products:**

These practices will be used to reduce the risks associated with any and all hazardous materials.

- Products will be kept in original containers unless they are not resealable
- Original labels and material safety data sheets (MSDS) will be reviewed and retained
- Contractor will follow procedures recommended by the manufacturer when handling hazardous materials
- If surplus product must be disposed of, manufacturers' or state/local recommended methods for proper disposal will be followed

The following product-specific practices will be followed onsite:

➤ **Petroleum Products:**

Vehicles and equipment that are fueled and maintained on site will be monitored for leaks, and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products onsite will be stored in tightly sealed containers, which are clearly labeled and will be protected from exposure to weather.

The contractor shall prepare an Oil Pollution Spill Prevention Control and Countermeasure plan when the project that involves the storage of petroleum products in 55 gallon or larger containers with a total combined storage capacity of 1,320 gallons. This is a requirement of 40 CFR 112.

KYTC BMP Plan for Project CID 20-4117

This project (will / will not) (3) have over 1,320 gallons of petroleum products with a total capacity, sum of all containers 55 gallon capacity and larger.

➤ **Fertilizers:**

Fertilizers will be applied at rates prescribed by the contract, standard specifications or as directed by the resident engineer. Once applied, fertilizer will be covered with mulch or blankets or worked into the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

➤ **Paints:**

All containers will be tightly sealed and stored indoors or under roof when not being used. Excess paint or paint wash water will not be discharged to the drainage or storm sewer system but will be properly disposed of according to manufacturers' instructions or state and local regulations.

➤ **Concrete Truck Washout:**

Concrete truck mixers and chutes will not be washed on pavement, near storm drain inlets, or within 75 feet of any ditch, stream, wetland, lake, or sinkhole. Where possible, excess concrete and wash water will be discharged to areas prepared for pouring new concrete, flat areas to be paved that are away from ditches or drainage system features, or other locations that will not drain off site. Where this approach is not possible, a shallow earthen wash basin will be excavated away from ditches to receive the wash water

➤ **Spill Control Practices**

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

- Manufacturers' recommended methods for spill cleanup will be clearly posted. All personnel will be made aware of procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area. Equipment and materials will include as appropriate, brooms, dust pans, mops, rags, gloves, oil absorbents, sand, sawdust, and plastic and metal trash containers.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.

KYTC BMP Plan for Project CID 20-4117

- Spills of toxic or hazardous material will be reported to the appropriate state/local agency as required by KRS 224 and applicable federal law.
- The spill prevention plan will be adjusted as needed to prevent spills from reoccurring and improve spill response and cleanup.
- Spills of products will be cleaned up promptly. Wastes from spill clean up will be disposed in accordance with appropriate regulations.

D. Other State and Local Plans

This BMP plan shall include any requirements specified in sediment and erosion control plans, storm water management plans or permits that have been approved by other state or local officials. Upon submittal of the NOI, other requirements for surface water protection are incorporated by reference into and are enforceable under this permit (even if they are not specifically included in this BMP plan). This provision does not apply to master or comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit issued for the construction site by state or local officials. There are no other local (MS4) requirements that are expected to be necessary for this project.

E. Maintenance

1. The BMP plan shall include a clear description of the maintenance procedures necessary to keep the control measures in good and effective operating condition.
- Maintenance of BMPs during construction shall be a result of weekly and post rain event inspections with action being taken by the contractor to correct deficiencies.
 - Post Construction maintenance will be a function of normal highway maintenance operations. Following final project acceptance by the cabinet, district highway crews will be responsible for identification and correction of deficiencies regarding ground cover and cleaning of storm water BMPs. The project manager shall identify any BMPs that will be for the purpose of post construction storm water management with specific guidance for any non-routine maintenance. There are no such BMP's for this project.

F. Inspections

Inspection and maintenance practices that will be used to maintain erosion and sediment controls:

KYTC BMP Plan for Project CID 20-4117

- All erosion prevention and sediment control measures will be inspected at least once each week and following any rain of one-half inch or more.
- Inspections will be conducted by individuals that have successfully completed the KEPSC-RI course as required by Section 213.02.02 of the Standard Specifications for Road and Bridge Construction, current edition.
- Inspection reports will be written, signed, dated, and kept on file.
- Areas at final grade will be seeded and mulched within 14 days.
- Areas that are not at final grade where construction has ceased for a period of 21 days or longer and soil stock piles shall receive temporary mulch no later than 14 days from the last construction activity in that area.
- All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of being reported.
- Built-up sediment will be removed from behind the silt fence before it has reached halfway up the height of the fence.
- Silt fences will be inspected for bypassing, overtopping, undercutting, depth of sediment, tears, and to ensure attachment to secure posts.
- Sediment basins will be inspected for depth of sediment, and built-up sediment will be removed when it reaches 50 percent of the design capacity and at the end of the job.
- Diversion dikes and berms will be inspected and any breaches promptly repaired. Areas that are eroding or scouring will be repaired and re-seeded / mulched as needed.
- Temporary and permanent seeding and mulching will be inspected for bare spots, washouts, and healthy growth. Bare or eroded areas will be repaired as needed.
- All material storage and equipment servicing areas that involve the management of bulk liquids, fuels, and bulk solids will be inspected weekly for conditions that represent a release or possible release of pollutants to the environment.

G. Non – Storm Water discharges

It is expected that non-storm water discharges may occur from the site during the construction period. Examples of non-storm water discharges include:

- Water from water line flushings.
- Water from cleaning concrete trucks and equipment.
- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).

KYTC BMP Plan for Project CID 20-4117

- Uncontaminated groundwater and rain water (from dewatering during excavation).

All non-storm water discharges will be directed to the sediment basin or to a filter fence enclosure in a flat vegetated infiltration area or be filtered via another approved commercial product.

H. Groundwater Protection Plan (3)

This plan serves as the groundwater protection plan as required by 401 KAR 5:037.

- Contractors statement: (3)

The following activities, as enumerated by 401 KAR 5:037 Section 2 that require the preparation and implementation of a groundwater protection plan, will or may be may be conducted as part of this construction project:

_____ 2. (e) land treatment or land disposal of a pollutant;

_____ 2. (f) Storing, ..., or related handling of hazardous waste, solid waste or special waste, ..., in tanks, drums, or other containers, or in piles, (This does not include wastes managed in a container placed for collection and removal of municipal solid waste for disposal off site);

_____ 2. (g) Handling of materials in bulk quantities (equal or greater than 55 gallons or 100 pounds net dry weight transported held in an individual container) that, if released to the environment, would be a pollutant;

_____ 2. (j) Storing or related handling of road oils, dust suppressants,, at a central location;

_____ 2. (k) Application or related handling of road oils, dust suppressants or deicing materials, (does not include use of chloride-based deicing materials applied to roads or parking lots);

_____ 2. (m) Installation, construction, operation, or abandonment of wells, bore holes, or core holes, (this does not include bore holes for the purpose of explosive demolition);

Or, check the following only if there are no qualifying activities

_____ There are no activities for this project as listed in 401 KAR 5:037 Section 2 that require the preparation and implementation of a groundwater protection plan.

KYTC BMP Plan for Project CID 20-4117

The contractor is responsible for the preparation of a plan that addresses the

401 KAR 5:037 Section 3. (3) Elements of site specific groundwater protection plan:

- (a) General information about this project is covered in the Project information;
- (b) Activities that require a groundwater protection plan have been identified above;
- (c) Practices that will protect groundwater from pollution are addressed in section C. Other control measures.
- (d) Implementation schedule – all practices required to prevent pollution of groundwater are to be in place prior to conducting the activity;
- (e) Training is required as a part of the ground water protection plan. All employees of the contractor, sub-contractor and resident engineer personnel will be trained to understand the nature and requirements of this plan as they pertain to their job function(s). Training will be accomplished within one week of employment and annually thereafter. A record of training will be maintained by the contractor with a copy provide to the resident engineer.
- (f) Areas of the project and groundwater plan activities will be inspected as part of the weekly sediment and erosion control inspections
- (g) Certification (see signature page.)

KYTC BMP Plan for Project CID 20-4117

Sub-Contractor Certification

The following sub-contractor shall be made aware of the BMP plan and responsible for implementation of BMPs identified in this plan as follows:

Subcontractor

Name:
Address:
Address:

Phone:

The part of BMP plan this subcontractor is responsible to implement is:

I certify under penalty of law that I understand the terms and conditions of the general Kentucky Pollutant Discharge Elimination System permit that authorizes the storm water discharges, the BMP plan that has been developed to manage the quality of water to be discharged as a result of storm events associated with the construction site activity and management of non-storm water pollutant sources identified as part of this certification.

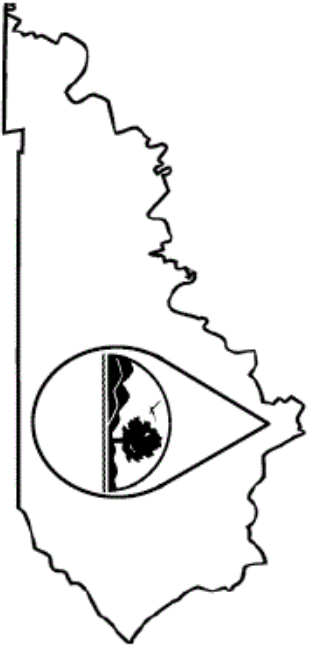
Signed _____ title _____,
Typed or printed name¹ signature

1. Sub Contractor Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601. Reference the Project Control Number (PCN) and KPDES number when one has been issued.

CID 20-4117
Rowan County
Highway Safety Improvement Project along US-60
from MP 10.834 – 17.112
Item No.: 9-9008

An electronic Notice of Intent (eNOI) for obtaining coverage under the Kentucky Pollutant Discharge Elimination System (KPDES) General Permit for Stormwater Discharges Associated with Construction Activities (KYR10) has been drafted, a copy of which is attached. Upon award, the Contractor will be identified in Section III of the form as the “Building Contractor” and the eNOI will be submitted for approval to the Kentucky Division of Water. The Contractor shall be responsible for advancing the work within this contract in a manner that is compliant with all applicable and appropriate KYTC specifications for sediment and erosion control, as well as meeting the requirements of the KYR10 permit and the KDOW.

eForm Submittal ID: 175734



KENTUCKY POLLUTION DISCHARGE ELIMINATION SYSTEM (KPDES)

**Notice of Intent (NOI) for coverage of Storm Water Discharge
Associated with Construction Activities Under the KPDES Storm
Water General Permit KYR100000**

**Click here for Instructions
(Controls/KPDES_FormKYR10_Instructions.htm)**

Click here to obtain information and a copy of the KPDES General Permit:
(<http://dep.ky.gov/formslibrary/Documents/KYR10PermitPage.pdf>)

(*) indicates a required field; (✓) indicates a field may be required based on user input or is an optionally required field

Reason for Submittal:(*) Application for New Permit Coverage ▼	Agency Interest ID: Agency Interest ID	Permit Number:(✓) KPDES Permit Number	
If change to existing permit coverage is requested, describe the changes for which modification of coverage is being sought:(✓)			
<p>ELIGIBILITY: Stormwater discharges associated with construction activities disturbing individually one (1) acre or more, including, in the case of a common plan of development, contiguous construction activities that cumulatively equal one (1) acre or more of disturbance.</p> <p>EXCLUSIONS: The following are excluded from coverage under this general permit: 1) Are conducted at or on properties that have obtained an individual KPDES permit for the discharge of other wastewaters which requires the development and implementation of a Best Management Practices (BMP) plan; 2) Any operation that the DOW determines an individual permit would better address the discharges from that operation; 3) Any project that discharges to an Impaired Water listed in the most recent Integrated Report, §305(b) as impaired for sediment and for which an approved TMDL has been developed.</p>			
SECTION I -- FACILITY OPERATOR INFORMATION (PERMITTEE)			
Company Name:(✓) KYTC District 9	First Name:(✓) Steve	M.I.: MI	Last Name:(✓) Gunnell
Mailing Address:(*) 822 Elizaville Ave.	City:(*) Flemingsburg	State:(*) Kentucky	Zip:(*) 41041

1/6/2020

Kentucky EEC eForms

eMail Address:(*)
Steve.Gunnell@ky.gov

Business Phone:(*)
6068452551

Alternate Phone:
Phone

SECTION II -- GENERAL SITE LOCATION INFORMATION

Project Name:(*)

Status of Owner/Operator(*)

SIC Code(*)

KYTC Project: CID 20-4117

State Government

1611 Highway and Street Constr

Company Name:(\)

First Name:(\)

M.I.:

Last Name:(\)

KYTC Department of Highways District 9

Steve

MI

Gunnell

Site Physical Address:(*)

US-60

City:(*)

State:(*)

Zip:(*)

Morehead

Kentucky

40351

County:(*)

Latitude(decimal degrees)(*)DMS to DD Converter
(https://www.fcc.gov/media/radio/dms-decimal)

Longitude(decimal degrees)(*)

Rowan

38.238951

-83.354259

SECTION III -- SPECIFIC SITE ACTIVITY INFORMATION

Project Description:(*)

Superelevation Improvements

a. For single projects provide the following information

Total Number of Acres in Project:(\)

Total Number of Acres Disturbed:(\)

45.6

11.9

Anticipated Start Date:(\)

Anticipated Completion Date:(\)

b. For common plans of development provide the following information

Total Number of Acres in Project:(\)

Total Number of Acres Disturbed:(\)

Acre(s)

Acre(s)

Number of individual lots in development, if applicable:(\)

Number of lots in development:(\)

lot(s)

Total acreage of lots intended to be developed:(√)

Project Acres

Number of acres intended to be disturbed at any one time:(√)

Disturbed Acres

Anticipated Start Date:(√)

Anticipated Completion Date:(√)

List Building Contractor(s) at the time of Application:(*)

+ Company Name	<input type="text"/>
----------------	----------------------

SECTION IV -- IF THE PERMITTED SITE DISCHARGES TO A WATER BODY THE FOLLOWING INFORMATION IS REQUIRED

Discharge Point(s):

Unnamed Tributary?	Latitude	Longitude	Receiving Water Name	Delete
1 No	38.253239	-83.337794	Hays Branch	Delete
2 No	38.253903	-83.337401	Hays Branch	Delete
3 No	38.255398	-83.336014	Hays Branch	Delete
4 No	38.257228	-83.333767	Hays Branch	Delete
5 Yes	38.257668	-83.333547	Hays Branch	Delete
6 No	38.260292	-83.332772	Hays Branch	Delete
7 No	38.262956	-83.333148	Hays Branch	Delete
8 Yes	38.264370	-83.333244	Hays Branch	Delete
9 No	38.270285	-83.325709	Hays Branch	Delete
10 No	38.271356	-83.323055	Hays Branch	Delete

SECTION V -- IF THE PERMITTED SITE DISCHARGES TO A MS4 THE FOLLOWING INFORMATION IS REQUIRED

Name of MS4:

Date of application/notification to the MS4 for construction site permit coverage:

Date

Discharge Point(s):(*)

--	--

SECTION VI -- WILL THE PROJECT REQUIRE CONSTRUCTION ACTIVITIES IN A WATER BODY OR THE RIPARIAN ZONE?

Will the project require construction activities in a water body or the riparian zone?:(*)	Yes ▼
If Yes, describe scope of activity: (✓)	describe scope of activity
Is a Clean Water Act 404 permit required?:(*)	Yes ▼
Is a Clean Water Act 401 Water Quality Certification required?:(*)	Yes ▼

SECTION VII -- NOI PREPARER INFORMATION

First Name: (*) First Name	M.I.: MI	Last Name: (*) Last Name	Company Name: (*) Company Name
Mailing Address: (*) Mailing Address	City: (*) City	State: (*) ▼	Zip: (*) Zip
eMail Address: (*) eMail Address	Business Phone: (*) Phone	Alternate Phone: Phone	

SECTION VIII -- ATTACHMENTS

Facility Location Map: (*)	Upload file
Supplemental Information:	Upload file

SECTION IX -- CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly

1/6/2020

Kentucky EEC eForms

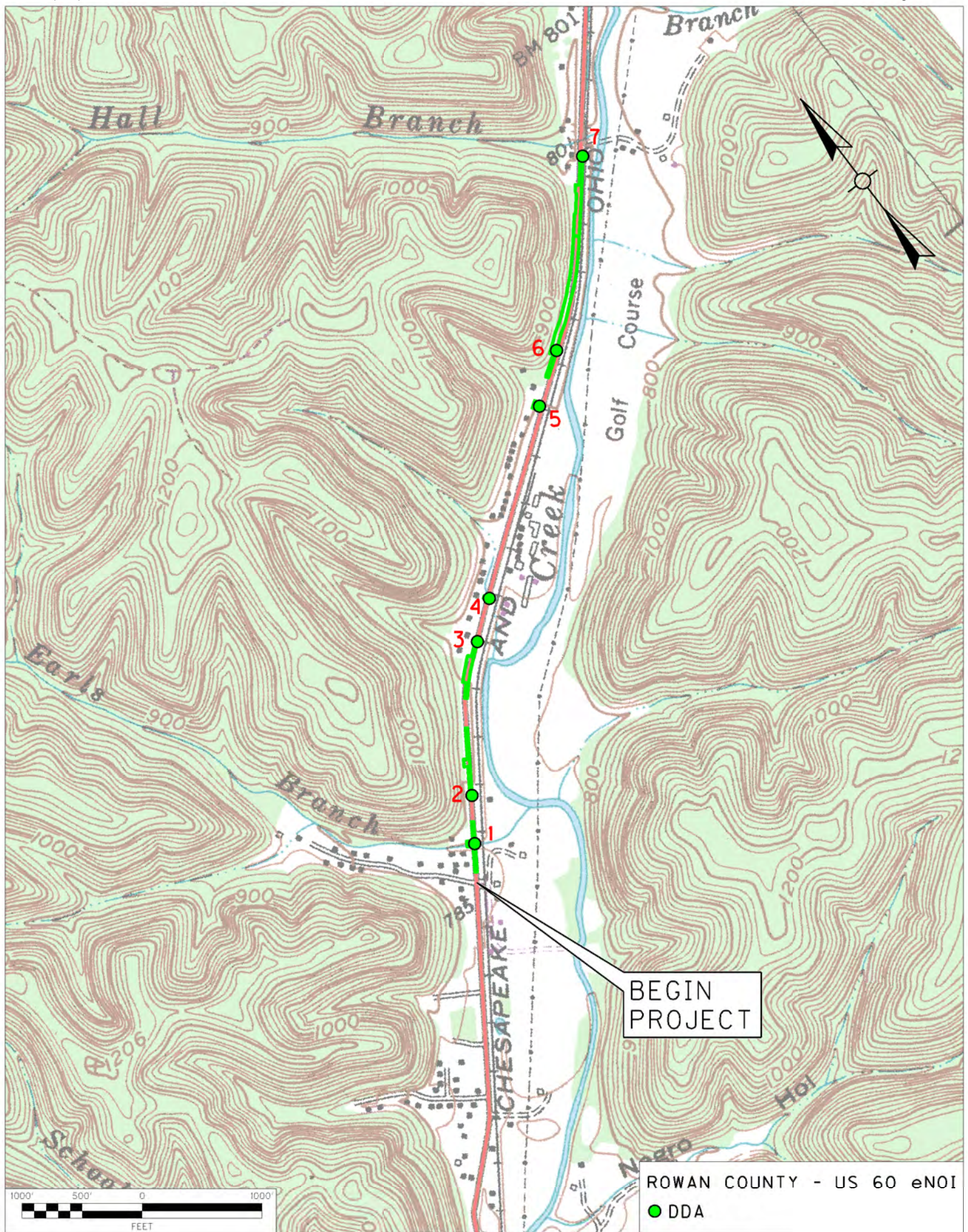
responsible for gathering the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: (*) <input type="text"/>	Title: (*) <input type="text"/>
Signature <input type="text"/>	Title <input type="text"/>

First Name: (*) <input type="text"/>	M.I.: <input type="text"/>	Last Name: (*) <input type="text"/>
First Name <input type="text"/>	MI <input type="text"/>	Last Name <input type="text"/>

eMail Address: (*) <input type="text"/>	Business Phone: (*) <input type="text"/>	Alternate Phone: <input type="text"/>	Signature Date: (*) <input type="text"/>
eMail Address <input type="text"/>	Phone <input type="text"/>	Phone <input type="text"/>	Date <input type="text"/>

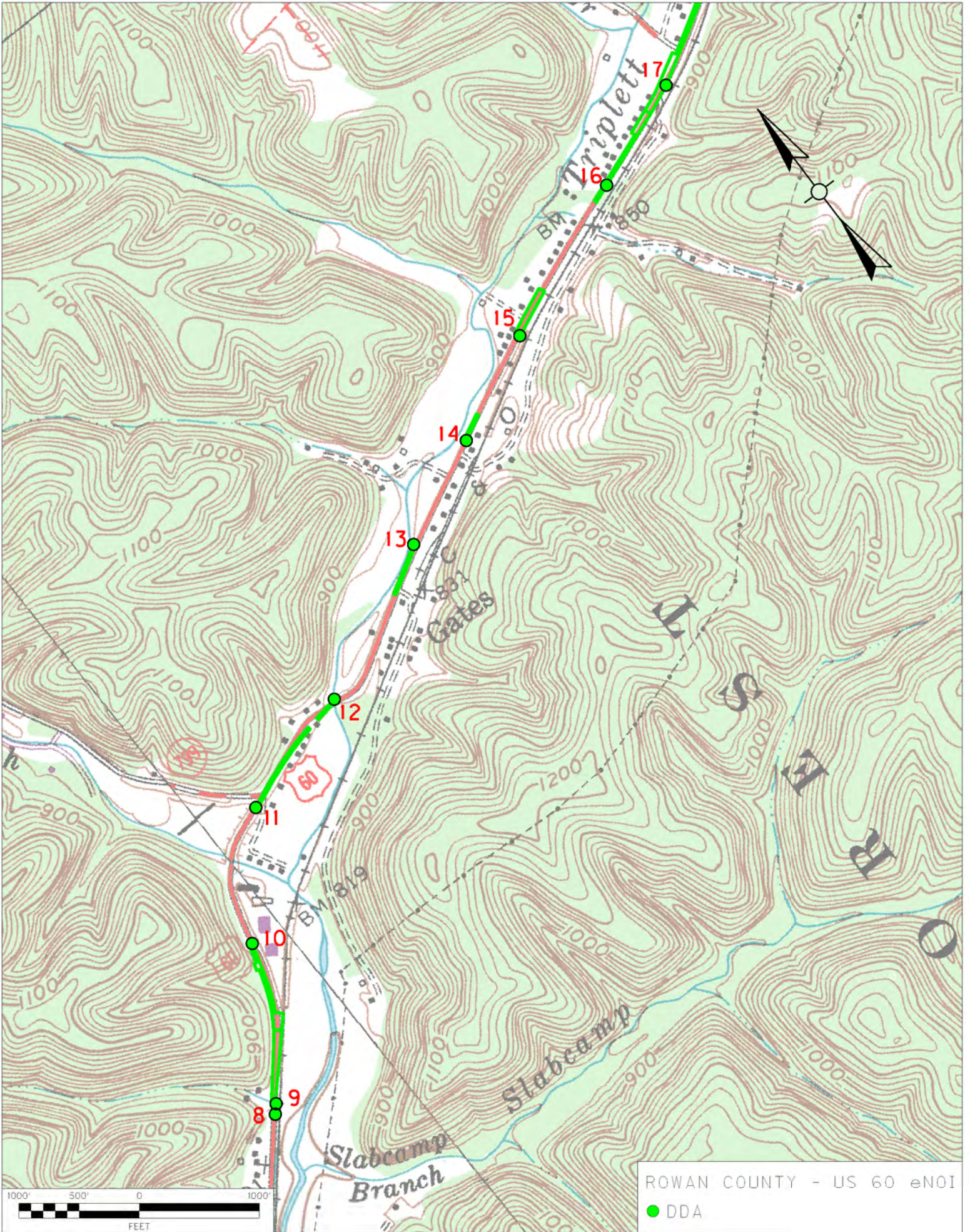
[Click to Save Values for Future Retrieval](#) [Click to Submit to EEC](#)



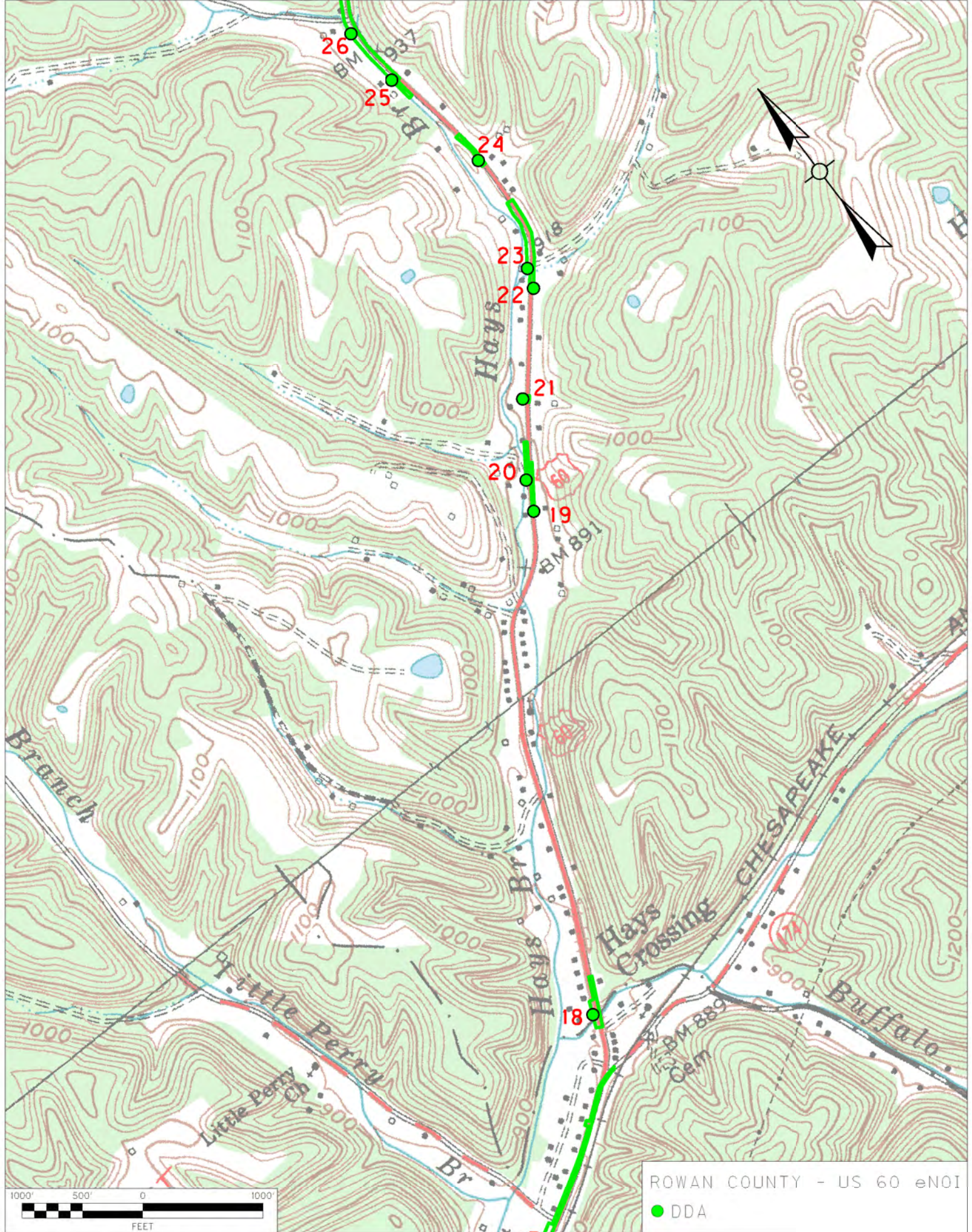
BEGIN
PROJECT

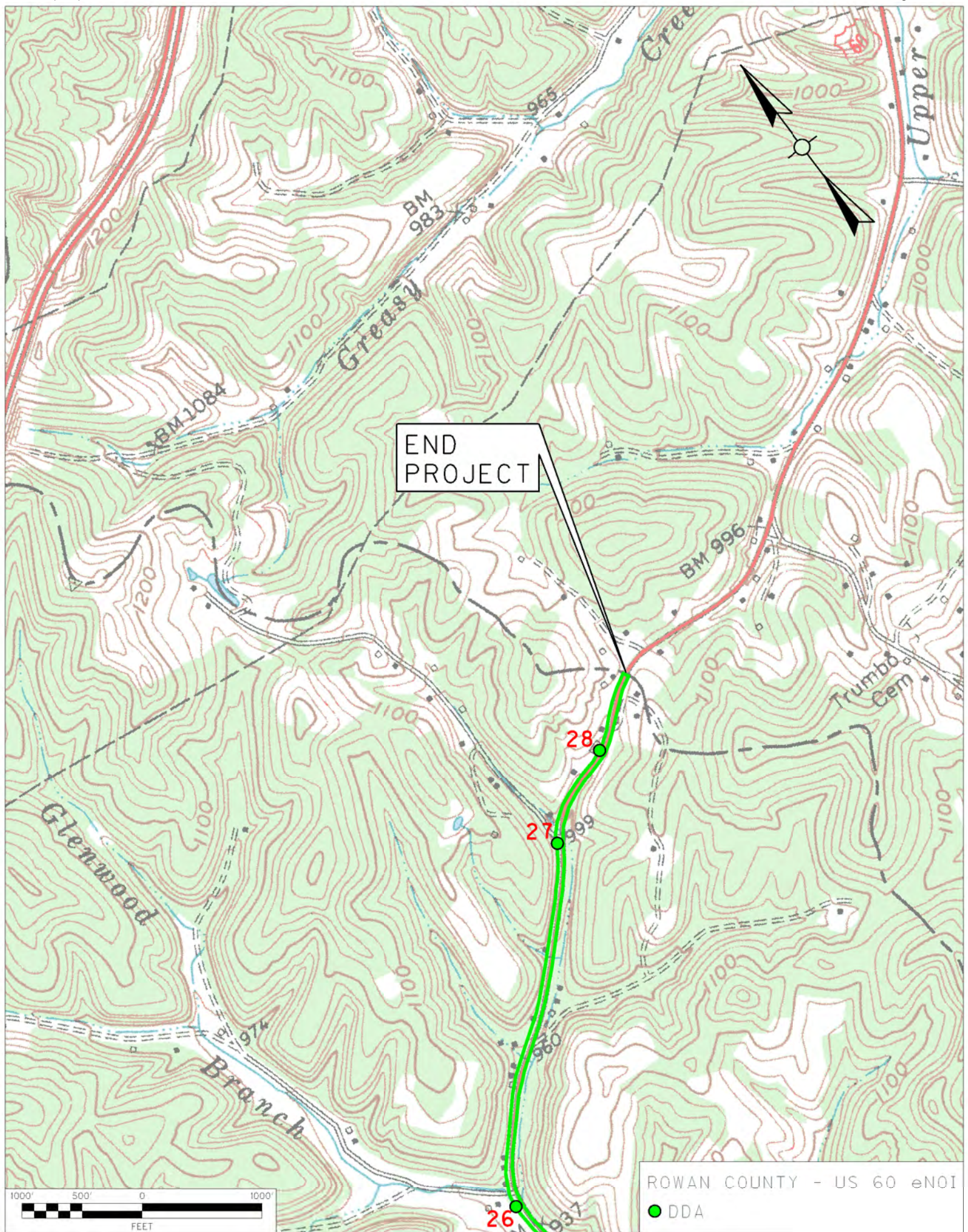
ROWAN COUNTY - US 60 eN01
● DDA





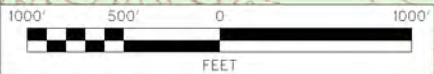
ROWAN COUNTY - US 60 eNOI
● DDA

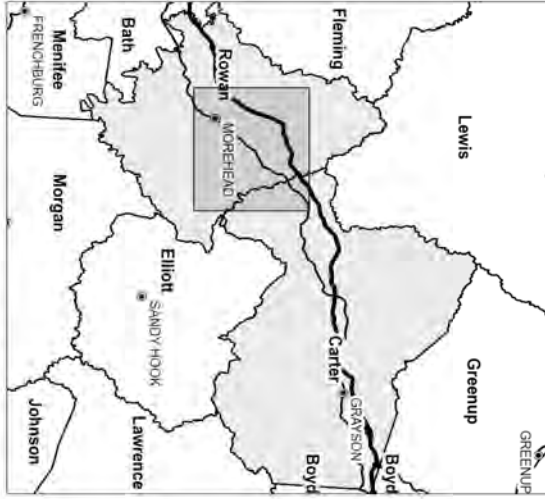
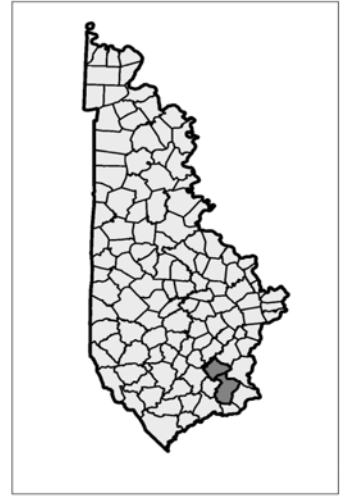




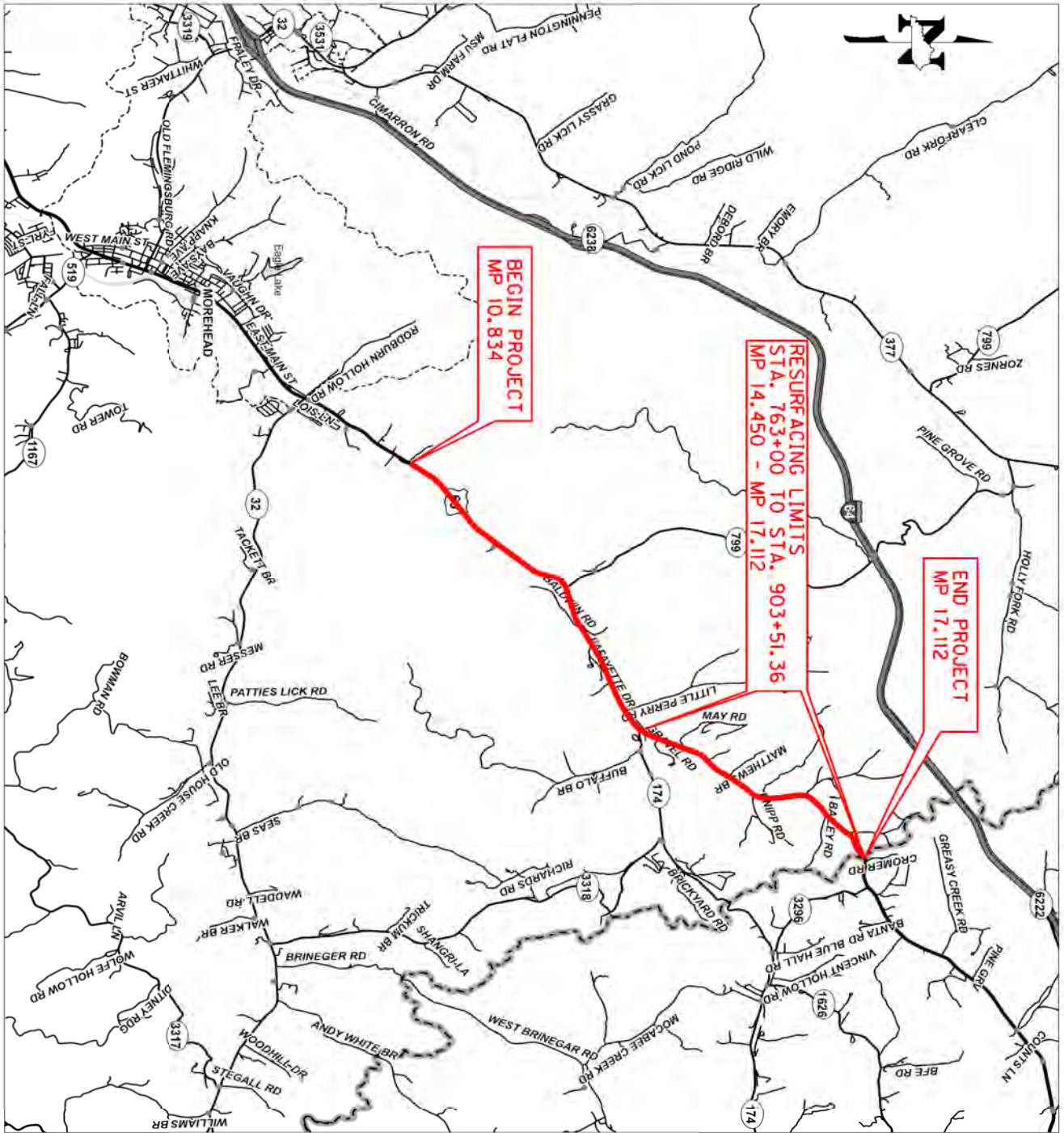
END
PROJECT

ROWAN COUNTY - US 60 eN01
● DDA





Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
PLANS OF
PROPOSED PROJECT
ROWAN COUNTY
US 60



COUNTY OF	ROWAN
ITEM NO.	9-9008.00

ROWAN COUNTY
MP 10.834 TO MP 17.112
ITEM NO. 9-9008.00
GENERAL SUMMARY
SHEET 1 OF 3

ITEM NUMBER	ITEM	UNIT	QUANTITY
1	DGA BASE	TON	401
100	ASPHALT SEAL AGGREGATE	TON	43.4
103	ASPHALT SEAL COAT	TON	5.3
190	LEVELING & WEDGING PG64-22	TON	793
212	CL2 ASPHALT BASE 1.00D PG64-22	TON	448
301	CL2 ASPHALT SURFACE 0.38D PG64-22	TON	3,694
356	ASPHALT MATERIAL FOR TACK	TON	34.4
462	CULVERT PIPE - 18"	LF	131
464	CULVERT PIPE - 24"	LF	159
466	CULVERT PIPE - 30"	LF	75
472	CULVERT PIPE - 60"	LF	4
496	CULVERT PIPE - 36" EQUIV.	LF	78
1204	PIPE CULVERT HEADWALL - 18"	EACH	3
1208	PIPE CULVERT HEADWALL - 24"	EACH	2
1213	PIPE CULVERT HEADWALL - 36" EQUIV.	EACH	4
1220	PIPE CULVERT HEADWALL - 60"	EACH	1
1374	METAL END SECTION TY 1-30 IN	EACH	1
1381	METAL END SECTION TY 2-18 IN	EACH	6
1383	METAL END SECTION TY 2-24 IN	EACH	2
1493	DROP BOX INLET TYPE 2	EACH	1
1642	JUNCTION BOX - 18 IN	EACH	3
1643	JUNCTION BOX - 24 IN	EACH	1
1726	SAFETY BOX INLET - 18 IN SBD-1	EACH	1
1727	SAFETY BOX INLET - 24 IN SBD-1	EACH	1
1987	DELINEATOR FOR GUARDRAIL (B/W)	EACH	228
2014	BARRICADE - TYPE III	EACH	4
2159	TEMPORARY DITCH	LF	16,574
2160	CLEAN TEMPORARY DITCH	LF	8,287
2351	GUARDRAIL - STEEL W BEAM - S FACE	LF	10,787.5
2355	GUARDRAIL - STEEL W BEAM - S FACE A	LF	100
2360	GUARDRAIL TERMINAL SECTION NO. 1	EACH	27
2363	GUARDRAIL CONNECTOR TO BRIDGE END TYPE A	EACH	4
2367	GUARDRAIL END TREATMENT TYPE 1	EACH	13
2369	GUARDRAIL END TREATMENT TYPE 2A	EACH	1
2373	GUARDRAIL END TREATMENT TYPE 3	EACH	2
2381	REMOVE GUARDRAIL	LF	11,437.5
2403	REMOVE CONCRETE MASONRY	CY	7
2483	CHANNEL LINING CLASS II	TON	640
2562	TEMPORARY SIGNS	SF	603.7
2569	DEMOBILIZATION	LS	1

MP 10.834 TO MP 17.112
ITEM NO. 9-9008.00
GENERAL SUMMARY
SHEET 2 OF 3

ITEM NUMBER	ITEM	UNIT	QUANTITY
2575	DITCHING AND SHOULDERING	LF	16,069
2603	FABRIC - GEOTEXTILE CLASS 2	SY	1,237
2625	REMOVE HEADWALL	EACH	10
2650	MAINTAIN AND CONTROL TRAFFIC	LS	1
2671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	6
2676	MOBILIZATION FOR MILL & TEXT	LS	1
2677	ASPHALT PAVE MILLING & TEXTURING	TON	279
2697	EDGE LINE RUMBLE STRIPS	LF	28,200
2701	TEMPORARY SILT FENCE	LF	16,574
2703	SILT TRAP TYPE A	EACH	12
2704	SILT TRAP TYPE B	EACH	12
2705	SILT TRAP TYPE C	EACH	12
2706	CLEAN SILT TRAP TYPE A	EACH	12
2707	CLEAN SILT TRAP TYPE B	EACH	12
2708	CLEAN SILT TRAP TYPE C	EACH	12
2726	STAKING	LS	1
3236	CRIBBING	SF	1,793
3234	RAILROAD RAILS - DRILLED	LF	636
3235	EXCAVATION AND BACKFILL	CY	571
3269	TRIM & REMOVE TREES & BRUSH	LF	590
5950	EROSION CONTROL BLANKET	SY	10,000
5952	TEMPORARY MULCH	SY	38,397
5953	TEMP SEEDING AND PROTECTION	SY	28,798
5963	INITIAL FERTILIZER	TON	1.78
5964	MAINTENANCE FERTILIZER	TON	3.00
5985	SEEDING AND PROTECTION	SY	57,596
5992	AGRICULTURAL LIMESTONE	TON	36.0
6406	SBM ALUM SHEET SIGNS 0.080 IN	SF	616.25
6407	SBM ALUM SHEET SIGNS 0.125 IN	SF	72.28
6410	STEEL POST TYPE 1	LF	1,239
6510	PAVE STRIPING - TEMP PAINT - 4 IN	LF	63,270
6542	PAVE STRIPING - THERMO - 6 IN W ①	LF	27,917
6543	PAVE STRIPING - THERMO - 6 IN Y ①	LF	27,917
6556	PAVE STRIPING - DUR TY 1-6 W ②	LF	222
6557	PAVE STRIPING - DUR TY 1-6 Y ②	LF	222
6569	PAVE MARKINGS - THERMO CROSS-HATCH	SF	475
6600	REMOVE PAVEMENT MARKER TYPE V	EACH	35

① TO BE USED IN THE RESURFACING LIMITS STA. 763+00 TO STA. 903+51.36 (SEE PAVEMENT MARKINGS SUMMARY)

② TO BE USED ON CONCRETE BRIDGE DECKS (SEE PAVEMENT MARKINGS SUMMARY)

MP 10.834 TO MP 17.112
ITEM NO. 9-9008.00
GENERAL SUMMARY
SHEET 3 OF 3

ITEM NUMBER	ITEM	UNIT	QUANTITY
8003	FOUNDATION PREPARATION (MP 16.23 - STA. 856+84)	LS	1
8003	FOUNDATION PREPARATION (MP 16.46 - STA. 869+09)	LS	1
8018	RETAINING WALL (POLYPROPYLENE BARRIER WALL)	SF	2,450
8100	CONCRETE - CLASS A	CY	46.80
8150	STEEL REINFORCEMENT	LBS	2,430
14059	W PIPE PVC 06 INCH	LF	400
14082	W SERV CTS/POLY SHORT SIDE 1 IN	EACH	4
14105	W VALVE 06 INCH *	EACH	3
14024	W MAIN POINT RELOCATE	EACH	6
20092ES611	10'X5' PRECAST BOX CULVERT	LF	43
20092ES611	4'X3' PRECAST BOX CULVERT	LF	6
20748ED	SHOULDER MILLING/TRENCHING	LF	2,442
21289ED	LONGITUDINAL EDGE KEY	LF	9,128
21134ND	REMOVE, STORE & REINSTALL SIGN	EACH	2
21373ND	REMOVE SIGN	EACH	105
23044NS710	SAFETY BOX INLET - 36 IN SBD-1	EACH	2
24189ER	DURABLE WATERBORNE MARKINGS - 6 IN W (3)	LF	38,157
24190ER	DURABLE WATERBORNE MARKINGS - 6 IN Y (3)	LF	38,157
24544EC	REMOVE (CULVERT @ STA. 841+79)	LF	30
24575ES610	HEADWALL (SLOPED & MITERED CONCRETE - 18 IN)	EACH	3
24575ES610	HEADWALL (SLOPED & MITERED CONCRETE - 30 IN)	EACH	1
24631EC	BARCODE SIGN INVENTORY	EACH	179
24695ED	4'X3' PRECAST BOX CULVERT HEADWALL	EACH	1
24894EC	REMOVE BOULDERS (RT. STA. 583+14 & STA. 583+42)	EACH	2

(3) TO BE USED IN THE NON- RESURFACING LIMITS STA. 763+00 TO STA. 903+51.36 (SEE PAVEMENT MARKINGS SUMMARY)

ROWAN COUNTY
MP 10.834 TO MP 17.112
ITEM NO. 9-9008.00
PAVING SUMMARY

PAVING AREAS		PAVING QUANTITIES	
ITEM	TOTAL	ITEM	TOTAL
EDGE LINE RUMBLE STRIPS	LF	EDGE LINE RUMBLE STRIPS	LF
	28,200		28,200
RESURFACING (STA. 763+00 TO STA. 903+51.76)	SY	RESURFACING (STA. 763+00 TO STA. 903+51.76)	TON
1.00" CL2 ASPHALT SURFACE 0.38D PG64-22	35,910	CL2 ASPHALT SURFACE 0.38D PG64-22	3,240
ASPHALT MATERIAL FOR TACK	35,910	ASPHALT MATERIAL FOR TACK	31.0
ASPHALT PAVE MILLING & TEXTURING	1,770	ASPHALT PAVE MILLING & TEXTURING	110
SUPERELEVATION IMPROVEMENTS (1)	SY	SUPERELEVATION IMPROVEMENTS (1)	TON
LEVELING & WEDGING PG64-22		LEVELING & WEDGING PG64-22	223
1.00" CL2 ASPHALT SURFACE 0.38D PG64-22	5,303	CL2 ASPHALT SURFACE 0.38D PG64-22	292
ASPHALT MATERIAL FOR TACK	5,303	ASPHALT MATERIAL FOR TACK	2.2
ASPHALT PAVE MILLING & TEXTURING	1,770	ASPHALT PAVE MILLING & TEXTURING	98
	LF		
LONGITUDINAL EDGE KEY	5,400		
PAVEMENT WIDENING (2)	SY	PAVEMENT WIDENING (2)	TON
3.00" CL2 ASPHALT BASE 1.00D PG64-22	2,442	CL2 ASPHALT BASE 1.00D PG64-22	404
1.00" CL2 ASPHALT SURFACE 0.38D PG64-22	1,656	CL2 ASPHALT SURFACE 0.38D PG64-22	91
ASPHALT MATERIAL FOR TACK	1,656	ASPHALT MATERIAL FOR TACK	0.7
	SY		
SHOULDER MILLING/TRENCHING	2,442		
	LF		
LONGITUDINAL EDGE KEY	3,728		
CULVERT PIPE REPLACEMENT & EXTENSION (3)	SY	CULVERT PIPE REPLACEMENT & EXTENSION (3)	TON
ASPHALT PAVE MILLING & TEXTURING	1,285	ASPHALT PAVE MILLING & TEXTURING	71
6.50" CL2 ASPHALT BASE 1.00D PG64-22	75	CL2 ASPHALT BASE 1.00D PG64-22	28
1.00" CL2 ASPHALT SURFACE 0.38D PG64-22	1,285	CL2 ASPHALT SURFACE 0.38D PG64-22	71
ASPHALT MATERIAL FOR TACK	1,285	ASPHALT MATERIAL FOR TACK	0.5
RCBC SUMMARY (4)	SY	RCBC SUMMARY (4)	TON
6.50" CL2 ASPHALT BASE 1.00D PG64-22	45	CL2 ASPHALT BASE 1.00D PG64-22	16
1.00" CL2 ASPHALT SURFACE 0.38D PG64-22	0	CL2 ASPHALT SURFACE 0.38D PG64-22	0
ASPHALT MATERIAL FOR TACK	0	ASPHALT MATERIAL FOR TACK	0.0
CRIBBING/POLYPROPYLENE BARRIER WALL (5)	SY	CRIBBING/POLYPROPYLENE BARRIER WALL (5)	TON
DGA BASE		DGA BASE	6
ASPHALT SEAL AGGREGATE		ASPHALT SEAL AGGREGATE	0.5
ASPHALT SEAL COAT		ASPHALT SEAL COAT	0.1

PAVING SUMMARY

CODE	ITEM	UNIT	PROJECT TOTAL
1	DGA BASE (6)	TON	401
100	ASPHALT SEAL AGGREGATE (6)	TON	43.4
103	ASPHALT SEAL COAT (6)	TON	5.3
190	LEVELING & WEDGING PG64-22 (7)	TON	793
212	CL2 ASPHALT BASE 1.00D PG64-22	TON	448
301	CL2 ASPHALT SURFACE 0.38D PG64-22	TON	3,694
356	ASPHALT MATERIAL FOR TACK	TON	34.4
2677	ASPHALT PAVE MILLING & TEXTURING	TON	279
2697	EDGE LINE RUMBLE STRIPS	LF	28,200
21289ED	LONGITUDINAL EDGE KEY	LF	9,128
209748ED	SHOULDER MILLING/TRENCHING	SY	2,442

NOTES:

All asphalt mixtures shall be estimated at 110 lbs. per SY per inch of depth unless otherwise noted.

Seal Coat: First course estimated at 3.2 lbs. per SY. Second course estimated at 2.8 lbs. per SY.

Seal Aggregate: First course estimated at 30 lbs. per SY. Second course estimated at 20 lbs. per SY.

(1) Carried over from the Superelevation Improvement Summary

(2) Carried over from the Pavement Widening Summary

(3) Carried over from the Culvert Pipe Replacement & Extension Summary

(4) Carried over from the RCBC Summary

(5) Carried over from the Cribbing/Modular Wall Summary

(6) Includes an additional 395 tons of DGA, 42.9 tons of Asphalt Seal Aggregate, and 5.2 tons of Asphalt Seal Coat for constructing applications of Double Asphalt Seal Coat at the Engineer's discretion within the resurfacing limits

(7) Includes 570 tons Leveling & Wedging to be used at the Engineer's Discretion within the resurfacing limits.

COUNTY OF	ITEM NO.	SHEET NO.
ROWAN	9.9008.00	

ROWAN COUNTY - US 60
MP 10.834 TO MP 17.112
ITEM NO. 9.9008.00
SUPERELEVATION IMPROVEMENT SUMMARY

Begin Station	End Station	Width of Section (ft)	Length of Section (ft)	Runoff Length	Runout Length	Existing Superlevation	Proposed Superlevation	Longitudinal Edge Key (LF)	CL2 Asph Surf 0.38D PG64-22 (tons)	Leveling and Wedging (tons)	Asphalt Pave Milling & Text (tons)	
617+01	626+09	23	908	128	51	2.47% - 4.13%	5.0% Lt.	1,816	128	57		
723+53	727+72	23	419	61	51	0.89% - 1.81%	2.4% Rt.	838	59	49		
742+87	750+35	23	748	110	51	2.20% - 8.57%	4.3% Lt.	1,496	105	77	44	
831+25	837+50	23	625	204	51	8.35% - 12.80%	9.0% Lt.	1,250	*	19	54	
TOTAL									5,400	292	202	98

ITEM	DESCRIPTION	UNIT	QUANTITY
190	LEVELING & WEDGING PG64-22	TON	223
301	CL2 ASPH SURFACE 0.38D PG64-22	TON	292
2677	ASPHALT PAVE MILLING & TEXTURING	TON	98
21289ED	LONGITUDINAL EDGE KEY	LF	5,400

* within resurfacing limits

NOTE: These numbers are for estimate purposes only. Final locations and quantities will be determined by the Engineer in the field.

Superlevation improvements to remove the dip/bump, with an estimated Leveling & Wedging Quantity, in the following locations :

	Leveling and Wedging (Tons)
Sta. 859+00 to Sta. 859+50	2
Sta. 860+25 to Sta. 860+75	2
Sta. 887+00 to Sta. 888+00	4
Sta. 891+75 to Sta. 894+00	9
Sta. 902+00 to Sta. 903+00	4
TOTAL =	21

NOTE: ALL QUANTITIES CARRIED OVER TO PAVING SUMMARY

US 60
SUPERELEVATION IMPROVEMENT SUMMARY

Pavement Widening Summary						Rowan County			Route: US 60		
Begin Mile Point	Station	End Mile Point	Station	Side	Width (ft)	Depth (inches)	Length (LF)	Milling/ Trenching (SY)	Longitudinal Edge Key (LF)	Asphalt Surface (Tons)	Asphalt Base (Tons)
11.61	613+10	11.97	631+85	Right	3	4.5	1875	625	1875	46	103
12.35	652+18	12.61	665+81	Right	3	4.5	1363	454	1363	33	75
15.42	814+00	15.47	816+97	Left	3	4.5	297	99	297	*	16
15.75	831+36	15.83	835+90	Left	3	4.5	454	151	454	*	25
15.77	832+77	15.84	836+39	Right	3	4.5	362	121	362	*	20
16.09	849+60	16.13	851+81	Left	3	4.5	221	74	221	*	12
16.14	852+05	16.25	857+77	Left	3	4.5	572	191	572	*	32
16.20	855+10	16.22	856+40	Right	3	4.5	130	43	130	*	7
16.22	856+40	16.41	866+68	Right	3	4.5	1028	343	1028	*	57
16.25	858+19	16.29	859+93	Left	3	4.5	174	58	174	*	10
16.42	866+80	16.48	870+39	Right	3	4.5	359	120	359	*	20
TOTALS							7325 LF	2442 SY	7325 LF	91 TONS	404 TONS

* within resurfacing limits

Remove Sign Summary

SIGN LOCATION			MUTCD Code	Sign Description	Sign Text / Remarks	Comments
Side of Road	Approx Station	Facing Traffic Traveling				
RT	574+80	C	OM3-R	Object Marker Type 3 Right		
LT	574+80	C	W14-3	No Passing Zone		
LT	574+98	NC	OM3-R	Object Marker Type 3 Right		
LT	578+36	C	CUSTOM	End XX Mile Speed	END 45 MILE SPEED	
		NC	R2-1	Speed Limit XX	45	
RT	578+49	C	CUSTOM	End XX Mile Speed	END 45 MILE SPEED	
			D10-2	Mile Marker (2 digit)	11	
		NC	R2-1	Speed Limit XX	45	
			D10-2	Mile Marker (2 digit)	11	
RT	584+41	C	W1-2R	Right Curve		
			W13-1P	XX MPH (Advisory Speed)	XX	
LT	585+04	NC	W3-5	Speed Limit XX Ahead	45	
RT	587+01	C	W2-2L	Side Road Left		
LT	590+77	NC	W1-2L	Left Curve		
			W13-1P	XX MPH (Advisory Speed)	XX	
LT	596+13	C	W14-3	No Passing Zone		
RT	597+69	C	R2-1	Speed Limit XX	55	
		NC	W14-3	No Passing Zone		
RT	598+42	C	R8-3A	No Parking		
		NC	R8-3A	No Parking		
RT	600+27	C	R8-3A	No Parking		
		NC	R8-3A	No Parking		
LT	606+64	C	W14-3	No Passing Zone		
RT	609+26	NC	W14-3	No Passing Zone		
RT	633+61	C	D10-2	Mile Marker (2 digit)	12	
		NC	D10-2	Mile Marker (2 digit)	12	
RT	635+62	NC	W14-3	No Passing Zone		
LT	647+12	C	W14-3	No Passing Zone		
RT	656+48	C	W1-2L	Left Curve		
			W13-1P	XX MPH (Advisory Speed)	XX	
LT	663+79	NC	W1-2R	Right Curve		
			W13-1P	XX MPH (Advisory Speed)	XX	
RT	667+59	C	W1-2R	Right Curve		
			W13-1P	XX MPH (Advisory Speed)	XX	
LT	668+84	NC	W1-8L	Left Chevron		
LT	669+99	C	W1-8R	Right Chevron		
		NC	W1-8L	Left Chevron		
LT	671+14	C	W1-8R	Right Chevron		
		NC	W1-8L	Left Chevron		
LT	672+29	C	W1-8R	Right Chevron		
		NC	W1-8L	Left Chevron		
LT	673+44	C	W1-8R	Right Chevron		
		NC	W1-8L	Left Chevron		
RT	673+51	C	M2-1	Junction		
			M1-5A	State Route Sign (3 or 4 digit)	799	
			CUSTOM	Modified R5-2 (No Trucks Symbol)	OVER 3 AXLES	Remove, store and reinstall adjacent to proposed JCT 799 assembly
LT	674+59	C	W1-8R	Right Chevron		
		NC	W1-8L	Left Chevron		
LT	675+74	C	W1-8R	Right Chevron		
LT	675+83	NC	M3-4	West		
			M1-4	US Route Sign (1 or 2 digit)	60	
LT	676+99	NC	W1-2L	Left Curve		
			W13-1P	XX MPH (Advisory Speed)	XX	
RT	677+01	C	M1-5A	State Route Sign (3 or 4 digit)	799	
			M6-1L	Left Arrow		
RT	677+01	C	M1-4	US Route Sign (1 or 2 digit)	60	
			M6-3	Straight Arrow		
LT	679+43	NC	M1-4	US Route Sign (1 or 2 digit)	60	
			M6-3	Straight Arrow		

Remove Sign Summary

SIGN LOCATION			MUTCD Code	Sign Description	Sign Text / Remarks	Comments
Side of Road	Approx Station	Facing Traffic Traveling				
LT	679+43	NC	M1-5A	State Route Sign (3 or 4 digit)	799	
			M6-1R	Right Arrow		
LT	681+98	NC	M2-1	Junction		
			M1-5A	State Route Sign (3 or 4 digit)	799	
			CUSTOM	Modified R5-2 (No Trucks Symbol)	OVER 3 AXLES	Remove, store and reinstall adjacent to proposed JCT 799 assembly
RT	685+54	C	M3-2	East		
			M1-4	US Route Sign (1 or 2 digit)	60	
			D10-2	Mile Marker (2 digit)	13	
RT	689+26	NC	D10-2	Mile Marker (2 digit)	13	
RT	691+05	C	OM3-R	Object Marker Type 3 Right		
RT	692+11	C	W1-2L	Left Curve		
			W13-1P	XX MPH (Advisory Speed)	XX	
LT	698+33	NC	W1-2R	Right Curve		
			W13-1P	XX MPH (Advisory Speed)	XX	
RT	705+77	NC	W14-3	No Passing Zone		
RT	706+90	C	W2-2L	Side Road Left		
			W16-8P	Advance Street Name (1-line)	Hamilton Rd	
RT	714+39	NC	W2-2R	Side Road Right		
			W16-8P	Advance Street Name (1-line)	Hamilton Rd	
LT	721+07	C	W14-3	No Passing Zone		
			W14-3	No Passing Zone	14	
			D10-2	Mile Marker (2 digit)		
RT	739+39	NC	D10-2	Mile Marker (2 digit)	14	
RT	743+31	C	W11-8	Emergency Vehicle		
			W2-2L	Side Road Left		
RT	746+51	C	W16-8P	Advance Street Name (1-line)	Little Perry Rd	
			W2-2L	Side Road Left		
RT	753+52	C	W16-8P	Advance Street Name (1-line)	Stinson Rd	
			W2-2R	Side Road Right		
LT	754+75	NC	W16-8P	Advance Street Name (1-line)	Little Perry Rd	
			W11-8	Emergency Vehicle		
RT	757+69	C	M2-1	Junction		
			M1-5A	State Route Sign (3 or 4 digit)	799	
LT	761+49	NC	W2-2R	Side Road Right		
			W16-8P	Advance Street Name (1-line)	Stinson Rd	
RT	761+76	C	W1-2L	Left Curve		
			W13-1P	XX MPH (Advisory Speed)	XX	
RT	762+76	C	M1-4	US Route Sign (1 or 2 digit)	60	
			M6-3	Straight Arrow		
RT	762+76	C	M1-5A	State Route Sign (3 or 4 digit)	174	
			M6-1R	Right Arrow		
LT	764+86	NC	M1-5A	State Route Sign (3 or 4 digit)	174	
			M6-1L	Left Arrow		
LT	764+86	NC	M1-4	US Route Sign (1 or 2 digit)	60	
			M6-3	Straight Arrow		
RT	767+76	C	M3-2	East		
			M1-4	US Route Sign (1 or 2 digit)	60	
RT	768+68	C	OM3-R	Object Marker Type 3 Right		
LT	768+80	NC	OM3-R	Object Marker Type 3 Right		
LT	769+25	NC	W1-2R	Right Curve		
			W13-1P	XX MPH (Advisory Speed)	XX	
LT	774+10	NC	M2-1	Junction		
			M1-5A	State Route Sign (3 or 4 digit)	174	
RT	786+95	NC	W14-3	No Passing Zone		
RT	792+00	C	D10-2	Mile Marker (2 digit)	15	
			D10-2	Mile Marker (2 digit)	15	
RT	795+65	C	W1-4R	Right Reverse Curve		
RT	809+79	C	W2-2L	Side Road Left		
			W16-8P	Advance Street Name (1-line)	Matthews Branch Rd	
LT	809+85	NC	W1-4R	Right Reverse Curve		
			W2-2R	Side Road Right		

Remove Sign Summary

SIGN LOCATION			MUTCD Code	Sign Description	Sign Text / Remarks	Comments
Side of Road	Approx Station	Facing Traffic Traveling				
LT	817+62	NC	W16-8P	Advance Street Name (1-line)	Matthews Branch Rd	
LT	818+07	C	W14-3	No Passing Zone		
RT	826+06	NC	W14-3	No Passing Zone		
RT	827+20	C	W2-2R	Side Road Right		
			W16-8P	Advance Street Name (1-line)	Knipp Hollow Rd	
RT	831+03	C	W1-2L	Left Curve		
			W13-1P	XX MPH (Advisory Speed)	XX	
RT	833+05	NC	W1-8R	Right Chevron		
RT	834+17	C	W1-8L	Left Chevron		
		NC	W1-8R	Right Chevron		
RT	835+12	C	W1-8L	Left Chevron		
		NC	W1-8R	Right Chevron		
LT	836+00	NC	W2-2L	Side Road Left		
			W16-8P	Advance Street Name (1-line)	Knipp Hollow Rd	
RT	836+24	C	W1-8L	Left Chevron		
LT	838+07	NC	W1-2R	Right Curve		
			W13-1P	XX MPH (Advisory Speed)	XX	
RT	853+77	C	W1-2R	Right Curve		
			W13-1P	XX MPH (Advisory Speed)	XX	
RT	844+80	C	D10-2	Mile Marker (2 digit)	16	
		NC	D10-2	Mile Marker (2 digit)	16	
LT	855+75	NC	W1-8L	Left Chevron		
		C	W1-8R	Right Chevron		
LT	856+55	NC	W1-8L	Left Chevron		
		C	W1-8R	Right Chevron		
LT	857+32	C	W1-8R	Right Chevron		
		NC	W1-8L	Left Chevron		
LT	858+19	C	W1-8R	Right Chevron		
		NC	W1-8L	Left Chevron		
LT	858+88	C	W1-8R	Right Chevron		
		NC	W1-8L	Left Chevron		
LT	859+66	C	W1-8R	Right Chevron		
		NC	W1-8L	Left Chevron		
LT	860+44	C	W1-8R	Right Chevron		
LT	862+43	NC	W1-2L	Left Curve		
			W13-1P	XX MPH (Advisory Speed)	XX	
RT	864+65	C	W1-4R	Right Reverse Curve		
LT	876+17	NC	W1-4R	Right Reverse Curve		
RT	882+13	C	W1-5L	Left Winding Road		
			W13-1P	XX MPH (Advisory Speed)	XX	
RT	883+13	C	S3-2	School Bus Turn Ahead		
LT	887+58	NC	W1-8L	Left Chevron		
LT	888+59	C	W1-8R	Right Chevron		
		NC	W1-8L	Left Chevron		
LT	889+35	C	W1-8R	Right Chevron		
		NC	W1-8L	Left Chevron		
LT	890+11	C	W1-8R	Right Chevron		
		NC	W1-8L	Left Chevron		
LT	890+87	C	W1-8R	Right Chevron		
		NC	W1-8L	Left Chevron		
LT	891+63	C	W1-8R	Right Chevron		
		NC	W1-8L	Left Chevron		
LT	892+41	C	W1-8R	Right Chevron		
		NC	W1-8L	Left Chevron		
LT	893+18	C	W1-8R	Right Chevron		
		NC	W1-8L	Left Chevron		
LT	893+95	C	W1-8R	Right Chevron		
RT	897+60	C	D10-2	Mile Marker (2 digit)	17	
		NC	D10-2	Mile Marker (2 digit)	17	
LT	898+20	NC	S3-2	School Bus Turn Ahead		
LT	904+99	NC	W1-5L	Left Winding Road		
			W13-1P	XX MPH (Advisory Speed)	XX	

SIGN LOCATION										SIGN SUMMARY				ROWAN COUNTY				US 60		TOTAL		Barcode
Side of Road	Approx Offset (ft)	Approx Station	Approx. Mile Point	Facing Traffic Traveling	MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	Text/ Symbol Color	Background Color	Sheeting Type	SBM Alum Sheet Signs (SQ FT)	SBM Alum Sheet Signs (SQ FT)	# of Sign Posts	Estimated Length of 2" Post (ft)	Estimated Sign Post Length (LF)	Sign Inv. (EACH)					
RT	21.3	574+80	10.886	C	OM3-R	Object Marker Type 3 Right		12 x 36	Black	Yellow	XI	3.00		1	11	11	1					
LT	24.5	574+80	10.886	C	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI		5.56	1	12	12	1					
LT	23.4	574+98	10.890	NC	OM3-R	Object Marker Type 3 Right		12 x 36	Black	Yellow	XI	3.00		1	11	11	1					
LT	21.0	578+36	10.954	C	CUSTOM	End XX Mile Speed	END 45 MILE SPEED	24 x 30	Black	White	XI	5.00		1	12	12	1					
				NC	R2-1	Speed Limit XX	45	24 x 30	Black	White	XI	5.00					1					
RT	24.6	578+49	10.956	C	CUSTOM	End XX Mile Speed	END 45 MILE SPEED	24 x 30	Black	White	XI	5.00		1	14	14	1					
				NC	D10-2	Mile Marker (2 digit)	11	10 x 27	White	Green	XI	1.88					1					
					R2-1	Speed Limit XX	45	24 x 30	Black	White	XI	5.00					1					
					D10-2	Mile Marker (2 digit)	11	10 x 27	White	Green	XI	1.88					1					
RT	19.7	584+41	11.068	C	W13-1P	Right Curve		30 x 30	Black	FL Yellow	XI	6.25		1	13	13	1					
					W13-1P	Right Curve	XX	18 x 18	Black	FL Yellow	XI	2.25					1					
LT	17.0	585+04	11.080	NC	W3-5	Speed Limit XX Ahead	45	36 x 36	White & Black	Yellow	XI	9.00		1	12	12	1					
RT	23.0	587+01	11.118	C	W2-2L	Side Road Left		30 x 30	Black	Yellow	XI	6.25		1	12	12	1					
LT	20.0	590+77	11.189	NC	W13-1P	XX MPH (Advisory Speed)	XX	18 x 18	Black	FL Yellow	XI	6.25		1	13	13	1					
LT	21.7	596+13	11.290	C	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI	5.56		1	12	12	1					
RT	19.6	597+69	11.320	C	R2-1	Speed Limit XX	55	24 x 30	Black	White	XI	5.00		1	12	12	1					
				NC	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI	5.56					1					
RT	20.4	598+42	11.334	C	R8-3A	No Parking		24 x 30	Red	White	XI	5.00		1	12	12	1					
				NC	R8-3A	No Parking		24 x 30	Red	White	XI	5.00					1					
RT	25.3	600+27	11.369	C	R8-3A	No Parking		24 x 30	Red	White	XI	5.00		1	12	12	1					
				NC	R8-3A	No Parking		24 x 30	Red	White	XI	5.00					1					
LT	18.9	606+64	11.489	C	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI	5.56		1	12	12	1					
RT	25.8	609+26	11.539	NC	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI	5.56		1	12	12	1					
RT	18.1	633+61	12.000	C	D10-2	Mile Marker (2 digit)	12	10 x 27	White	Green	XI	1.88		1	11	11	1					
				NC	D10-2	Mile Marker (2 digit)	12	10 x 27	White	Green	XI	1.88					1					
RT	24.3	635+62	12.038	NC	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI	5.56		1	12	12	1					
LT	20.1	647+12	12.256	C	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI	5.56					1					
RT	20.0	656+48	12.433	C	W1-2L	Left Curve		30 x 30	Black	FL Yellow	XI	6.25		1	13	13	1					
					W13-1P	XX MPH (Advisory Speed)	XX	18 x 18	Black	FL Yellow	XI	2.25					1					
LT	20.0	663+79	12.572	NC	W1-2R	Right Curve		30 x 30	Black	FL Yellow	XI	6.25		1	13	13	1					
					W13-1P	XX MPH (Advisory Speed)	XX	18 x 18	Black	FL Yellow	XI	2.25					1					
RT	20.0	667+59	12.644	C	W1-2R	Right Curve		30 x 30	Black	FL Yellow	XI	6.25		1	13	13	1					
					W13-1P	XX MPH (Advisory Speed)	XX	18 x 18	Black	FL Yellow	XI	2.25					1					
LT	25.0	668+84	12.667	NC	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1					
					W1-8R	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00					1					
LT	25.0	669+99	12.689	NC	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1					
					W1-8R	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00					1					
LT	25.0	671+14	12.711	C	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1					
					W1-8R	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00					1					
LT	25.0	672+29	12.733	C	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1					
				NC	W1-8R	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00					1					
LT	25.0	673+44	12.755	C	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1					
				NC	W1-8R	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00					1					
RT	29.5	673+51	12.756	C	W1-5A	State Route Sign (3 or 4 digit)	799	30 x 24	Black	White	XI	5.00		1	12	12	1					
					W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00					1					
LT	25.0	674+59	12.776	NC	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1					

SIGN LOCATION										Sign Summary			ROWAN COUNTY				US 60		TOTAL		Barcode
Side of Road	Approx Offset (ft)	Approx Station	Approx. Mile Point	Facing Traffic Traveling	MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	Text/ Symbol Color	Background Color	Sheeting Type	SBM Alum Sheet Signs (0.080 IN SQ FT)	SBM Alum Sheet Signs (0.125 IN SQ FT)	# of Sign Posts	Estimated Length of 2" Post (ft)	Estimated Sign Post Length (LF)	Sign Inv. (EACH)				
LT	25.0	675+74	12.798	C	W1-8R	Right Chevron		18 x 24	Black	Fl Yellow	XX	3.00		1	11	11	1				
LT	25.0	675+83	12.800	NC	M3-4	West		24 x 12	Black	White	XX	2.00		1	12	12	1				
LT	20.0	676+99	12.822	NC	W1-2L	US Route Sign (1 or 2 digit)	60	24 x 24	Black	White	XX	4.00		1	13	13	1				
LT	20.0	676+99	12.822	NC	W1-2L	Left Curve		30 x 30	Black	Fl Yellow	XX	6.25		1	13	13	1				
RT	35.6	677+01	12.822	C	W13-1P	XX MPH (Advisory Speed)	XX	18 x 18	Black	Fl Yellow	XX	2.25		1	12	12	1				
RT	35.6	677+01	12.822	C	M1-5A	State Route Sign (3 or 4 digit)	799	30 x 24	Black	White	XX	5.00		1	12	12	1				
RT	38.6	677+01	12.822	C	M6-1L	Left Arrow		21 x 15	Black	White	XX	2.19		1	12	12	1				
RT	38.6	677+01	12.822	C	M1-4	US Route Sign (1 or 2 digit)	60	24 x 24	Black	White	XX	4.00		1	12	12	1				
LT	31.2	679+43	12.868	NC	M6-3	Straight Arrow		21 x 15	Black	White	XX	2.19		1	12	12	1				
LT	34.2	679+43	12.868	NC	M1-5A	State Route Sign (3 or 4 digit)	799	30 x 24	Black	White	XX	5.00		1	12	12	1				
RT	25.8	680+05	12.880	C	M6-1R	Right Arrow		21 x 15	Black	White	XX	2.19		1	12	12	1				
RT	25.8	680+05	12.880	C	M3-2	East		24 x 12	Black	White	XX	2.00		1	12	12	1				
LT	22.3	681+98	12.916	NC	M1-4	US Route Sign (1 or 2 digit)	60	24 x 24	Black	White	XX	4.00		1	12	12	1				
RT	25.8	685+54	12.984	NC	M1-5A	State Route Sign (3 or 4 digit)	799	30 x 24	Black	White	XX	5.00		1	12	12	1				
RT	17.5	689+26	13.054	C	D10-2	Mile Marker (2 digit)	13	10 x 27	White	Green	XX	1.88		1	11	11	1				
LT	15.6	691+05	13.088	NC	OM3-R	Object Marker Type 3 Right	13	10 x 27	White	Green	XX	1.88		1	11	11	1				
RT	20.0	692+11	13.108	C	OM3-R	Object Marker Type 3 Right		12 x 36	Black	Yellow	XX	3.00		1	11	11	1				
LT	20.0	698+33	13.226	NC	W1-2L	Left Curve	XX	30 x 30	Black	Fl Yellow	XX	6.25		1	13	13	1				
RT	17.3	705+77	13.367	NC	W1-2R	Right Curve	XX	30 x 30	Black	Fl Yellow	XX	6.25		1	13	13	1				
RT	20.0	706+90	13.388	C	W13-1P	XX MPH (Advisory Speed)	XX	18 x 18	Black	Fl Yellow	XX	2.25		1	12	12	1				
RT	20.0	714+39	13.530	NC	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XX	5.56		1	12	12	1				
LT	35.7	721+07	13.657	C	W16-8P	Advance Street Name (1-line)	Hamilton Rd	40.5 x 8	Black	Yellow	XX	2.25		1	12	12	1				
RT	33.9	739+39	14.004	NC	W14-3	No Passing Zone	14	48 x 48 x 36	Black	Yellow	XX	5.56		1	12	12	1				
RT	31.5	743+31	14.078	C	D10-2	Mile Marker (2 digit)	14	10 x 27	White	Green	XX	1.88		1	12	12	1				
RT	29.5	746+51	14.138	C	D10-2	Mile Marker (2 digit)		10 x 27	White	Green	XX	1.88		1	12	12	1				
RT	31.1	753+52	14.271	C	W11-8	Emergency Vehicle		30 x 30	Black	Yellow	XX	6.25		1	12	12	1				
LT	17.8	754+75	14.295	NC	W2-2L	Slide Road Left		30 x 30	Black	Yellow	XX	6.25		1	12	12	1				
LT	41.8	757+69	14.350	NC	W16-8P	Advance Street Name (1-line)	Stinson Rd	40.5 x 8	Black	Yellow	XX	2.25		1	12	12	1				
LT	27.3	758+19	14.360	C	W16-8P	Advance Street Name (1-line)		40.5 x 8	Black	Yellow	XX	2.25		1	12	12	1				
LT	21.8	761+49	14.422	NC	M1-5A	State Route Sign (3 or 4 digit)	799	30 x 24	Black	White	XX	5.00		1	12	12	1				
RT	19.8	761+76	14.427	C	W2-2R	Slide Road Right		30 x 30	Black	Yellow	XX	6.25		1	12	12	1				
RT	29.2	762+76	14.446	C	W16-8P	Advance Street Name (1-line)	Stinson Rd	40.5 x 8	Black	Yellow	XX	2.25		1	12	12	1				
RT	29.2	762+76	14.446	C	W16-8P	Advance Street Name (1-line)		40.5 x 8	Black	Yellow	XX	2.25		1	12	12	1				
RT	29.2	762+76	14.446	C	W16-8P	Advance Street Name (1-line)		40.5 x 8	Black	Yellow	XX	2.25		1	12	12	1				
RT	29.2	762+76	14.446	C	W16-8P	Advance Street Name (1-line)		40.5 x 8	Black	Yellow	XX	2.25		1	12	12	1				
RT	29.2	762+76	14.446	C	W16-8P	Advance Street Name (1-line)		40.5 x 8	Black	Yellow	XX	2.25		1	12	12	1				

SIGN LOCATION										SIGN SUMMARY				ROWAN COUNTY				US 60		TOTAL		Barcode
Side of Road	Approx Offset (ft)	Approx Station	Approx. Mile Point	Facing Traffic Travelling	MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x n)	Text/ Symbol Color	Background Color	Sheeting Type	SBM Alum Sheet Signs (SQ FT)	SBM Alum Sheet Signs (SQ FT)	# of Sign Posts	Estimated Length of 2" Post (ft)	Estimated Sign Post Length (LF)	Sign Invt. (EACH)					
RT	32.2	762+76	14.446	C	M1-5A M6-1R	State Route Sign (3 or 4 digit) Right Arrow	174	30 x 24 21 x 15	Black Black	White White	XI XI	5.00 2.19		1	12	12	1					
LT	32.3	764+86	14.486	NC	M1-5A M6-1L	State Route Sign (3 or 4 digit) Left Arrow	174	30 x 24 21 x 15	Black Black	White White	XI XI	5.00 2.19		1	12	12	1					
LT	35.3	764+86	14.486	NC	M1-4 M6-3	US Route Sign (1 or 2 digit) Straight Arrow	60	24 x 24 21 x 15	Black Black	White White	XI XI	4.00 2.19		1	12	12	1					
RT	32.4	767+76	14.541	C	M3-2 M1-4	US Route Sign (1 or 2 digit) East	60	24 x 12 24 x 24	Black Black	White White	XI XI	2.00 4.00		1	12	12	1					
RT	19.8	768+68	14.558	C	OM3-R	Object Marker Type 3 Right		12 x 36	Black	Yellow	XI	3.00		1	11	11	1					
LT	19.0	768+80	14.561	NC	OM3-R	Object Marker Type 3 Right		12 x 36	Black	Yellow	XI	3.00		1	11	11	1					
LT	27.8	769+25	14.569	NC	W1-2R W13-1P	Right Curve XX MPH (Advisory Speed)	XX	30 x 30 18 x 18	Black Black	FL Yellow FL Yellow	XI XI	6.25 2.25		1	13	13	1					
LT	19.3	774+10	14.661	NC	M2-1 M1-5A	Junction State Route Sign (3 or 4 digit)	174	21 x 15 30 x 24	Black Black	White White	XI XI	2.19 5.00		1	12	12	1					
RT	43.9	786+95	14.904	NC	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI		5.56	1	12	12	1					
RT	27.7	792+00	15.000	C	D10-2	Mile Marker (2 digit)	15	10 x 27	White	Green	XI	1.88		1	11	11	1					
RT	25.3	795+65	15.069	C	D10-2	Mile Marker (2 digit)	15	10 x 27	White	Green	XI	1.88		1	12	12	1					
RT	21.4	809+79	15.337	C	W1-4R W2-2L	Right Reverse Curve Slide Road Left		30 x 30 30 x 30	Black Black	FL Yellow FL Yellow	XI XI	6.25 2.25		1	12	12	1					
LT	20.0	809+85	15.338	NC	W1-6-8P W1-4R	Advance Street Name (1-line) Right Reverse Curve	Matthews Branch Rd	40.5 x 8 30 x 30	Black Black	Yellow FL Yellow	XI XI	2.25 6.25		1	12	12	1					
LT	26.6	817+62	15.485	NC	W16-8P	Advance Street Name (1-line)	Matthews Branch Rd	40.5 x 8	Black	Yellow	XI	2.25		1	12	12	1					
LT	31.6	818+07	15.494	C	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI		5.56	1	12	12	1					
RT	25.5	826+06	15.645	NC	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI		5.56	1	12	12	1					
RT	20.7	827+20	15.667	C	W2-2R W16-8P	Slide Road Right Advance Street Name (1-line)		30 x 30 40.5 x 8	Black Black	Yellow Yellow	XI XI	6.25 2.25		1	12	12	1					
RT	25.2	831+03	15.739	C	W1-2L	Left Curve		30 x 30	Black	FL Yellow	XI	6.25		1	13	13	1					
RT	24.7	833+05	15.777	NC	W13-1P	XX MPH (Advisory Speed)	XX	18 x 18	Black	FL Yellow	XI	2.25		1	11	11	1					
RT	26.5	834+17	15.799	C	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1					
RT	24.0	835+12	15.817	NC	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1					
LT	27.7	836+00	15.833	NC	W2-2L W16-8P	Right Chevron Advance Street Name (1-line)		30 x 30 40.5 x 8	Black Black	Yellow Yellow	XI XI	6.25 2.25		1	12	12	1					
RT	23.1	836+24	15.838	C	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1					
LT	16.5	838+07	15.873	NC	W1-2R W13-1P	Right Curve XX MPH (Advisory Speed)	XX	30 x 30 18 x 18	Black Black	FL Yellow FL Yellow	XI XI	6.25 2.25		1	13	13	1					
RT	27.7	844+80	16.000	C	D10-2	Mile Marker (2 digit)	16	10 x 27	White	Green	XI	1.88		1	11	11	1					
RT	20.0	853+77	16.170	C	D10-2 W1-2R W13-1P	Mile Marker (2 digit) Right Curve XX MPH (Advisory Speed)	16 XX	10 x 27 30 x 30 18 x 18	White Black Black	Green FL Yellow FL Yellow	XI XI XI	1.88 6.25 2.25		1	13	13	1					
LT	20.0	855+75	16.207	NC	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1					
LT	20.0	856+55	16.223	NC	W1-8R W1-8L	Right Chevron Left Chevron		18 x 24 18 x 24	Black Black	FL Yellow FL Yellow	XI XI	3.00 3.00		1	11	11	1					

SIGN LOCATION										SIGN SUMMARY			SHEETING			US 60		TOTAL	
Side of Road	Approx Offset (ft)	Approx Station	Approx. Mile Point	Facing Traffic Traveling	MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	Text/ Symbol Color	Background Color	Sheeting Type	SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	# of Sign Posts	Estimated Length of 2" Post (ft)	Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)		
LT	20.0	857+32	16.237	C	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
				NC	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00							
					W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
					W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00							
LT	20.0	858+19	16.254	NC	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
					W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00							
LT	20.0	858+88	16.267	NC	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
					W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00							
LT	20.0	859+66	16.281	NC	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
					W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00							
LT	20.0	860+44	16.296	C	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
					W1-2L	Left Curve		30 x 30	Black	FL Yellow	XI	6.25		1	13	13	1		
LT	20.0	862+43	16.334	NC	W1-4R	Right Reverse Curve		30 x 30	Black	FL Yellow	XI	6.25		1	12	12	1		
					W1-4R	Right Reverse Curve		30 x 30	Black	FL Yellow	XI	6.25		1	12	12	1		
RT	20.0	864+65	16.376	C	W1-4R	Right Reverse Curve		30 x 30	Black	FL Yellow	XI	6.25		1	12	12	1		
					W1-4R	Right Reverse Curve		30 x 30	Black	FL Yellow	XI	6.25		1	12	12	1		
RT	20.0	876+17	16.594	NC	W1-5L	Left Winding Road		30 x 30	Black	FL Yellow	XI	6.25		1	13	13	1		
					W1-5L	Left Winding Road		30 x 30	Black	FL Yellow	XI	6.25		1	13	13	1		
RT	20.0	882+13	16.707	C	W1-4P	School Bus Turn Ahead	XX	18 x 18	Black	FL Yellow-Green	XI	9.00		1	12	12	1		
					W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
LT	20.0	887+58	16.810	NC	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
					W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
LT	20.0	888+59	16.829	NC	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
					W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
LT	20.0	889+35	16.844	NC	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
					W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
LT	20.0	890+11	16.858	NC	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
					W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
LT	20.0	890+87	16.873	C	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
					W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
LT	20.0	891+63	16.887	NC	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
					W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
LT	20.0	892+41	16.902	NC	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
					W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
LT	20.0	893+18	16.916	C	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
					W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
LT	20.0	893+95	16.931	C	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		1	11	11	1		
					D10-2	Mile Marker (2 digit)	17	10 x 27	White	Green	XI	1.88		1	11	11	1		
RT	27.7	897+60	17.000	NC	D10-2	Mile Marker (2 digit)	17	10 x 27	White	Green	XI	1.88		1	11	11	1		
LT	21.2	898+20	17.011	NC	S3-2	School Bus Turn Ahead		36 x 36	Black	FL Yellow-Green	XI	9.00		1	12	12	1		
					W1-5L	Left Winding Road		30 x 30	Black	FL Yellow	XI	6.25		1	13	13	1		
LT	20.0	904+99	17.140	NC	W13-1P	XX MPH (Advisory Speed)	XX	18 x 18	Black	FL Yellow	XI	2.25		1	13	13	1		

Summary of Items			
SBM Alum Sheet Signs 0.080 INCH	616.25	SQ FT	
SBM Alum Sheet Signs 0.125 INCH	72.28	SQ FT	
Barcode Sign Inventory	179	EACH	

Summary of Items			
Steel Post - Type 1	1239	LF	
GMSS Type D	0	EACH	
GMSS Type D (Surface Mount)	0	EACH	
Class A Concrete for Signs	0	CU YD	

Guardrail Summary

County: ROWAN

Route: US 60

Notes: Begin/End Milepoints are estimated to include the entire length of the Rail AND the End Treatments. The Engineer may adjust the proposed guardrail termini to ensure proper installation of the guardrail system.

Proposed Guardrail to be Constructed											Existing Guardrail to be Removed				
Side of Road	Proposed BEGINNING Treatment	Approx. BEGIN Station	Approx. BEGIN Milepoint	Approx. END Station	Approx. END Milepoint	Proposed ENDING Treatment	Proposed Length (LF)	Number of Radius	Remarks	Side of Road	Approx. BEGIN Station	Approx. BEGIN Milepoint	Approx. END Station	Approx. END Milepoint	Existing Length (LF)
RT	Type 1	572+55	10.844	574+82	10.887	Single Face A	162.50		25 FT of Single Face A, Connect to Guardrail on Existing Bridge	RT	572+55	10.844	574+82	10.887	237.50
LT	Terminal Section 1	574+72	10.885	574+82	10.887	Single Face A	2.50	4	25 FT of Single Face A, Connect to Guardrail on Existing Bridge	LT	574+72	10.885	574+82	10.887	12.50
RT	Single Face A	575+00	10.890	576+64	10.921	Terminal Section 1	157.50	2	25 FT of Single Face A, Connect to Guardrail on Existing Bridge	RT	575+00	10.890	576+64	10.921	175.00
LT	Single Face A	575+00	10.890	575+11	10.892	Terminal Section 1	2.50	4	25 FT of Single Face A, Connect to Guardrail on Existing Bridge	LT	575+00	10.890	575+11	10.892	12.50
RT	Type 1	587+12	11.120	592+02	11.213	Type 1	400.00			RT	587+12	11.120	592+02	11.213	500.00
RT	Terminal Section 1	613+10	11.612	631+85	11.967	Type 1	1,832.50	2		RT	613+10	11.612	631+85	11.967	1,875.00
RT	Terminal Section 1	652+18	12.352	665+81	12.610	Type 1	1,332.50	2		RT	652+18	12.352	665+81	12.610	1,375.00
LT	Terminal Section 1	699+68	13.252	704+01	13.334	Type 1	395.00	2		LT	699+68	13.252	704+01	13.334	437.50
RT	Terminal Section 1	767+41	14.534	768+80	14.561	Connector Type A	157.50	2		RT	767+41	14.534	771+59	14.613	425.00
LT	Terminal Section 1	767+77	14.541	768+45	14.554	Connector Type A	82.50	2		LT	767+77	14.541	769+60	14.576	187.50
LT	Connector Type A	768+69	14.559	769+60	14.576	Terminal Section 1	107.50	2		LT		0.000		0.000	0.00
RT	Connector Type A	769+05	14.565	771+59	14.613	Terminal Section 1	270.00	2		RT		0.000		0.000	0.00
LT	Terminal Section 1	813+78	15.413	816+97	15.473	Terminal Section 1	340.00	4		LT	813+78	15.413	816+97	15.473	325.00
RT	Terminal Section 1	820+52	15.540	820+74	15.544	Terminal Section 1	40.00	4		RT	820+52	15.540	820+74	15.544	25.00
RT		830+07	15.721	830+57	15.730	Type 1	0.00		Remove 75 LF guardrail for site distance and replace with End Treatment Type 1	RT	830+07	15.721	831+32	15.745	125.00
LT	Type 2A	831+36	15.745	836+10	15.835	Terminal Section 1	490.00	4		LT	831+36	15.745	836+10	15.835	475.00
RT	Type 1	832+77	15.772	836+39	15.841	Type 1	262.50			RT	832+77	15.772	836+39	15.841	362.50
RT										RT	841+72	15.942	841+95	15.946	25.00
LT	Type 1	849+60	16.091	851+81	16.133	Terminal Section 1	182.50	2		LT	849+60	16.091	851+81	16.133	225.00
LT	Terminal Section 1	852+05	16.137	857+77	16.246	Terminal Section 1	590.00	4		LT	852+05	16.137	857+77	16.246	575.00
RT	Type 3	854+88	16.191	866+68	16.414	Type 1	1,137.50			RT	854+88	16.191	866+68	16.414	1,187.50
LT	Terminal Section 1	858+19	16.254	859+93	16.287	Terminal Section 1	190.00	4		LT	858+19	16.254	859+93	16.287	175.00
RT	Type 1	866+80	16.417	870+39	16.485	Terminal Section 1	320.00	2		RT	866+80	16.417	870+39	16.485	362.50
RT	Terminal Section 1	870+75	16.491	875+08	16.573	Terminal Section 1	452.50	4		RT	870+75	16.491	875+08	16.573	437.50

Guardrail Summary

County: ROWAN

Route: US 60

Notes: Begin/End Milepoints are estimated to include the entire length of the Rail AND the End Treatments. The Engineer may adjust the proposed guardrail termini to ensure proper installation of the guardrail system.

Side of Road	Proposed BEGINNING Treatment Section	Approx. BEGIN Station	Approx. BEGIN Milepoint	Approx. END Station	Approx. END Milepoint	Proposed Guardrail to be Constructed			Number of Radius of Rail	Remarks	Existing Guardrail to be Removed					
						Proposed ENDING Treatment	Proposed Length (LF)	Proposed Type			Side of Road	Approx. BEGIN Station	Approx. BEGIN Milepoint	Approx. END Station	Approx. END Milepoint	Existing Length (LF)
RT	Terminal Section 1	875+33	16.578	877+94	16.628	Terminal Section 1	277.50	Type 1	4		RT	875+33	16.578	877+94	16.628	262.50
RT	Terminal Section 1	878+02	16.629	888+70	16.831	Type 3	1,082.50	Type 3	2		RT	878+02	16.629	888+70	16.831	1,075.00
LT	Terminal Section 1	887+98	16.818	893+57	16.924	Type 1	520.00	Type 1	2		LT	886+98	16.799	892+57	16.905	562.50

Summary of Items

Item Description	Quantity	Unit	Notes
Guardrail-Steel W/Beam-S Face	10,787.50	LF	
Remove Guardrail	11,437.50	LF	
End Treatment Type 1	13	EACH	GR Connector to Bridge End Type A
End Treatment Type 2A	1	EACH	GR Connector to Bridge End Type A-1
End Treatment Type 3	2	EACH	GR Connector to Bridge End Type C
End Treatment Type 4A	0	EACH	GR Connector to Bridge End Type D
End Treatment Type 7	0	EACH	DGA
Terminal Section No. 1	27	EACH	Asphalt Seal Coat
Guardrail-Steel W/Beam-S Face A	100	LF	Asphalt Seal Aggregate
			Guardrail-Bridge Case II

ROWAN COUNTY - US 60
CULVERT PIPE REPLACEMENT & EXTENSION SUMMARY

Mile Point	Station	Pipe Size, Type	Existing			Length (LF)	Remove Pipe (LF ³)		Remove Headwall (each)	Pipe Extension Length (LF)		Class A Concrete for Anchor/Collar (CU YD) ³	Culvert Pipe 18" (LF)	Culvert Pipe 24" (LF)	Culvert Pipe 30" (LF)	Culvert Pipe 36" EQUIV. (LF)	Culvert Pipe 60" (LF)	Headwall or Drainage Box		Ditching & Shouldering (LF)		Ditching (LF)		Channel Lining (TON)		Comments	PAVING				
			Left Hdwl	Right Hdwl	Skew		Left	Right		Left	Right							Left	Right	Left	Right	Left	Right	Left	Right		Left	Right	1.0" CL2 ASPH SURFACE 0.38D PG64-22 (TONS)	6.5" CL2 ASPH BASE 1.00D PG64-22 (TONS)	MILLING AND TEXTURING
11.02	584+70	24" VCP	STONE HDWL	STONE HDWL		31	15	16						34					24" SAFETY BOX INLET	24" STD. HDWL	50	50							14.1	3.7	14.1
11.15	588+72	24" VCP	STONE HDWL	OPEN		47	20	27						49					24" S&F HDWL	24" STD. HDWL	50	*							14.1	3.7	14.1
11.18	590+36	30" RCP	STONE HDWL	STONE HDWL		40	4	4	2		3	4.76			11				36" SAFETY BOX INLET	30" PIPE CULV. HDWL	50	*									
11.56	610+63	30" VCP	STONE HDWL	STONE HDWL		39	19	20							46				36" SAFETY BOX INLET	30" SLOPED & MITTERED HDWL	50	50							14.1	4.1	14.1
11.66	615+49	18" HDPE	STONE HDWL	STONE HDWL	12 DEGREE LT.	37	4	4	2			2.26	8						18" SAFETY BOX INLET	18" STD. HDWL	50	*									
11.82	623+99	18" HDPE	STONE HDWL	OPEN		36	4	4	2			2.26	20						18" JUNCTION BOX IN DITCH	18" STD. HDWL	50	*									
11.92	629+22	18" HDPE	STONE HDWL	OPEN		36	4	4	2			2.26	24						18" JUNCTION BOX IN DITCH	18" STD. HDWL	50	*									
12.35	651+92	4.5X3 METAL ARCH	STONE HDWL	CONC. HDWL	24 DEGREE LT.	49														24" JUNCTION BOX IN DITCH	24" STD. HDWL	0	0								
12.58	664+01	24" VCP	OPEN	OPEN		44	19	25						76					18" SLOPED & MITTERED HDWL	18" SLOPED & MITTERED HDWL	50	*							14.1	3.7	14.1
14.16	747+65	18" RCP	OPEN GRAVEL	POURED CONC.		38	4	4	1	5	5	2.26	18						18" SLOPED & MITTERED HDWL	18" SLOPED & MITTERED HDWL	50	*									
14.38	759+26	18" VCP ASSUMED	OPEN	OPEN		35	18	17					61						18" SLOPED & MITTERED HDWL	18" JUNCTION BOX IN DITCH	50	*							14.1	3.2	14.1
15.54	820+62	24" VCP	STONE HDWL	STONE HDWL		39	20	19							39				36" EQUIV. HDWL	36" EQUIV. HDWL	50	50							*	4.6	
15.94	841+79	VARIABLES	CONC. HDWL	CONC. STONE HDWL		30	14	16							39				36" EQUIV. PIPE CULV. HDWL	36" EQUIV. PIPE CULV. HDWL	50	50							*	4.6	
16.81	887+52	60" CMP	OPEN	OPEN		35	4									4			60" PIPE CULV. HDWL	DROP BOX INLET TYPE 2	29	*									
16.97	896+23	30" VCP	CONC. HDWL	STONE HDWL		37	4	1				2.38			18						0	*							10		
TOTALS:						313 LF	10 Ea.				27.97 CU YD	131 LF	159 LF	75 LF	78 LF	4 LF				779 LF	0 LF		10 TON			71 TON	28 TON	71 TON			

* within FDOTS resurfacing limits

Headwall Totals			
Standard Headwall - 18"	3	Each	
Standard Headwall - 24"	2	Each	
Pipe Culvert Headwall - 36" Equiv.	4	Each	
Safety Box Inlet 1.8 inch	1	Each	
Safety Box Inlet 2.4 inch	1	Each	
Safety Box Inlet 3.6 inch	2	Each	
Sloped & Mitered Conc. Headwall - 18"	3	Each	
Sloped & Mitered Conc. Headwall - 30"	1	Each	
Sloped & Hared Headwall - 24"	2	Each	
Remove Headwall	10	Each	

* These locations of Ditching & Shouldering are already accounted for in the Ditching & Shouldering Summary and are NOT included in the Ditching & Shouldering TOTALS on this Pipe and Drainage Items Summary.

NOTES:

1. These Pipe and Drainage Item quantities and locations are approximate and are intended to provide a basis for bid. Final locations, flow line elevations, grate elevations, and quantities will be determined by the contractor and approved by the engineer in the field.
2. Clearing and grubbing necessary to install drainage items, as directed by the Engineer, will be considered part of Site Preparation, which is incidental to the Contract.
3. Remove Pipe shall be incidental to the construction of new pipe.
4. See Standard Drawing RDX-060-03 for Intermediate Anchor details.

ROWAN COUNTY - US 60																	
MILEPOINT 10.834 TO 17.112																	
ITEM NO. 9-9008.00																	
RCBC SUMMARY																	
Mile Point	Station	CULVERT SIZE	EXTENSION LENGTH	FOUNDATION PREPARATION	RCBC				MISCELLANEOUS							REMARKS	
					CULVERT HEADWALL	CULVERT EXTENSION	CULVERT HEADWALL	CULVERT EXTENSION	CONCRETE - CLASS A	REMOVE CONCRETE MASONRY	CHANNEL LINING CLASS II	CHANNEL LINING CLASS III	DITCHING & SHOULDERING LEFT	DITCHING & SHOULDERING RIGHT	STEEL REINFORCEMENT		EMBANKMENT IN PALCE
ITEM CODE	UNIT TO BID				LS	EACH	LF	EACH	LF	CY	CY	TONS	LF	LF	LBS	CY	
	11.28	595+74	3'X2'	0	0	0	0	0	0		4			0	0		
	16.23	856+84	10'X5'	44	1		43			18.00		30	*	*	2,430		43 LF - 10'X5' PRECAST RCBC (w/ 16 Tons CL2 Asphalt Base 1,00D PG64-22)(CONCRETE - CLASS A & STEEL REINFORCEMENT ESTIMATED FOR CAST-IN-PLACE HEADWALLS)
	16.46	869+09	4'X3'	6	1		1	1	6	0.83			50	*			6 LF - OF 4'X3' PRECAST BOX CULVERT, INSTALL CRIBBING TO SHORE-UP SHOULDER ON RIGHT SIDE. CONCRETE - CLASS A ESTIMATED FOR JUNCTION BOX AT CONNECTION
PROJECT TOTALS						0	43	1	6	18.83	4	30	0	50	0	2,430	0

- NOTES:
1. The Contractor shall field verify types and dimensions prior to ordering.
 2. See culvert detail sheets.
 3. Embankment to be used for backfilling culvert extensions and adjusting sideslopes around culvert and wingwalls.

COUNTY OF	ITEM NO.	SHEET NO.
ROWAN	9-9008.00	

ROWAN COUNTY - US 60
MP 10.834 TO MP 17.112
ITEM NO. 9-9008.00

POLYPROPYLENE BARRIER WALL & CRIBBING SUMMARY

Begin Milepoint	Begin Station	End Milepoint	End Station	Offset	POLYPROPYLENE BARRIER WALL (SF)	PROPOSED CRIBBING (SF)	DGA (TON)	ASPHALT SEAL AGGREGATE (TON)	ASPHALT SEAL COAT (TON)	FABRIC GEOTEXTILE Class 2 (SY)	RAILROAD RAILS - DRILLED (LF)	EXCAVATION & BACKFILL (CY)	COMMENTS
15.417	814+00	15.445	815+50	Lt.	1,050							130	Install Proprietylene Barrier Wall system. Approx. max. height 7' - (*)
15.773	832+81	15.811	834+81	Lt.	1,400							175	Install Proprietylene Barrier Wall system. Approx. max. height 7' - (*)
16.399	865+85	16.414	866+68	Rt.		996				258	348	148	Install cribbing. Approx. max. height 12' - (*)
16.458	868+96	16.463	869+23	Rt.		324				84	120	48	Install cribbing. Approx. max. height 12' - (*)
16.804	887+26	16.813	887+71	Rt.		473	6	0.5	0.1	125	168	70	Install cribbing. Approx. max. height 10.5'
TOTALS					2,450	1,793	6	0.5	0.1	467	636	571	

ITEM	DESCRIPTION	UNIT	QUANTITY
1	DGA BASE	TON	6
100	ASPHALT SEAL AGGREGATE	TON	0.5
108	ASPHALT SEAL COAT	TON	0.1
2599	FABRIC - GEOTEXTILE CLASS 2	SY	467
3236	CRIBBING	SF	1,793
3234	RAILROAD RAILS - DRILLED	LF	636
3235	EXCAVATION AND BACKFILL	CY	571
8018	RETAINING WALL (POLYPROPYLENE BARRIER WALL)	SF	2,450

* - QUANTITIES SHOWN ON PAVEMENT WIDENING SUMMARY SHEET FOR SHOULDER
NOTE: These numbers are for estimate purposes only. Final locations and quantities will be determined by the Engineer in the field.

NOTE: ALL QUANTITIES CARRIED OVER TO GENERAL SUMMARY

US 60	POLYPROPYLENE BARRIER WALL & CRIBBING SUMMARY
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COUNTY OF	ITEM NO.	SHEET NO.
ROWAN	9-9008.00	

ROWAN COUNTY - US 60
MP 10.834 TO MP 17.112
ITEM NO. 9-9008.00
TREE TRIMMING / REMOVAL SUMMARY

Offset	Begin Milepoint	Begin Station	End Milepoint	End Station	Description	Length (LF)
LT	14.231	751+39	14.343	757+29	Trim & Remove Trees & Brush	590
PROJECT TOTALS:						590

ITEM 3269 DESCRIPTION TRIM & REMOVE TREES & BRUSH UNIT QUANTITY LF 590

NOTE: REFER TO TREE CLEARING DETAIL FOR CLEARING OFFSET AND HEIGHT

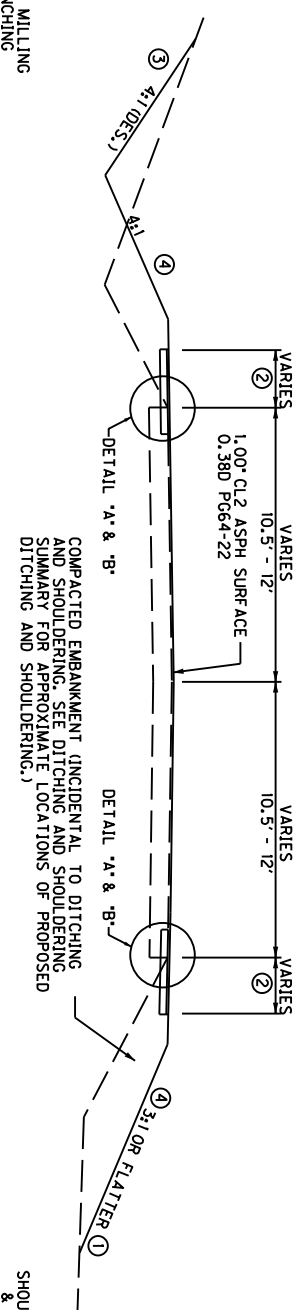
US 60
TREE TRIMMING TABULATION

9-9008.00 - ROWAN CO. - US 60 PAVEMENT MARKINGS SUMMARY							
PAVEMENT STRIPING SUMMARY - DURABLE WATERBORNE (NON-RESURFACING LIMITS: STA. 572+03.52 STA. 763+00)							
Begin		End		Side	Length (LF)	Type	Comments
Mile Point	Station	Mile Point	Station				
10.834	572+03.52	10.886	574+80	LT	276	6" Single Solid White	
10.834	572+03.52	10.886	574+80	CL	553	6" Yellow (Various Configuration)	Match existing configuration
10.834	572+03.52	10.886	574+80	RT	276	6" Single Solid White	
10.890	574+98	14.451	763+00	LT	18,802	6" Single Solid White	
10.890	574+98	14.451	763+00	CL	37,604	6" Yellow (Various Configuration)	Match existing configuration
10.890	574+98	14.451	763+00	RT	18,802	6" Single Solid White	
PAVEMENT STRIPING SUMMARY - THERMOPLASTIC (RESURFACING LIMITS: STA. 763+00 TO STA. 903+51.36)							
Begin		End		Side	Length (LF)	Type	Comments
Mile Point	Station	Mile Point	Station				
14.451	763+00	14.553	768+41	LT	541	6" Single Solid White	
14.451	763+00	14.555	768+51	CL	1,102	6" Yellow (Various Configuration)	Match existing configuration
14.451	763+00	14.557	768+61	RT	561	6" Single Solid White	
14.562	768+89	14.910	787+23	LT	1,834	6" Single Solid White	
14.564	768+99	14.911	787+31	CL	3,664	6" Yellow (Various Configuration)	Match existing configuration
14.566	769+09	14.913	787+39	RT	1,830	6" Single Solid White	
14.918	787+68	17.112	903+51.36	LT	11,583	6" Single Solid White	
14.920	787+76	17.112	903+51.36	CL	23,151	6" Yellow (Various Configuration)	Match existing configuration
14.921	787+84	17.112	903+51.36	RT	11,567	6" Single Solid White	
PAVEMENT STRIPING SUMMARY - PAVEMENT STRIPING DURABLE TY 1 (FOR CONCRETE BRIDGE DECKS)							
Begin		End		Side	Length (LF)	Type	Comments
Mile Point	Station	Mile Point	Station				
10.886	574+80	10.890	574+98	LT	18	6" Single Solid White	
10.886	574+80	10.890	574+98	CL	36	6" Yellow (Various Configuration)	Match existing configuration
10.886	574+80	10.890	574+98	RT	18	6" Single Solid White	
14.553	768+41	14.562	768+89	LT	48	6" Single Solid White	
14.555	768+51	14.564	768+99	CL	96	6" Yellow (Various Configuration)	Match existing configuration
14.557	768+61	14.566	769+09	RT	48	6" Single Solid White	
14.910	787+23	14.918	787+68	LT	45	6" Single Solid White	
14.911	787+31	14.920	787+76	CL	90	6" Yellow (Various Configuration)	Match existing configuration
14.913	787+39	14.921	787+84	RT	45	6" Single Solid White	
PAVEMENT HATCHING SUMMARY - THERMOPLASTIC							
Begin		End		Side	Area (SQ FT)	Type	Comments
Mile Point	Station	Mile Point	Station				
14.852	784+16	14.915	787+53	LT	475	White Hatching	X = 24 IN. Y = 20 FT.

Summary	Totals
DURABLE WATERBORNE MARKING - 6 IN W	38,157 LF
DURABLE WATERBORNE MARKING - 6 IN Y	38,157 LF
PAVE STRIPING - THERMO - 6 IN W	27,917 LF
PAVE STRIPING - THERMO - 6 IN Y	27,917 LF
PAVE STRIPING - DUR TY 1-6 IN W	222 LF
PAVE STRIPING - DUR TY 1-6 IN Y	222 LF
PAVE MARKING - THERMO CROSS-HATCH	475 SQ FT

TYPICAL SECTIONS

COUNTY OF	ITEM NO.
ROWAN	9-9008.00

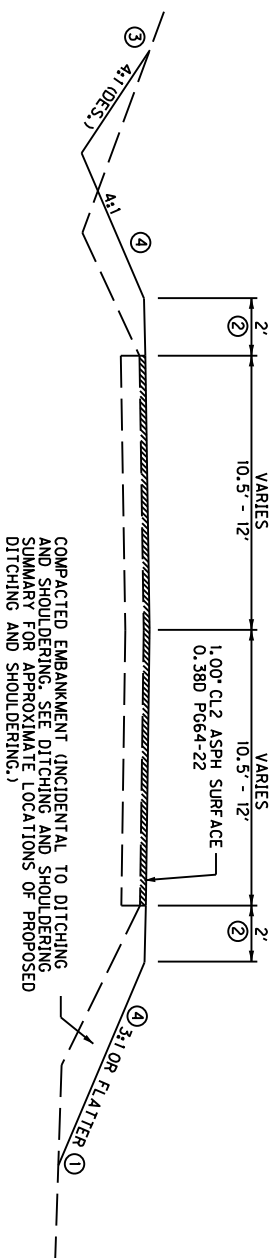
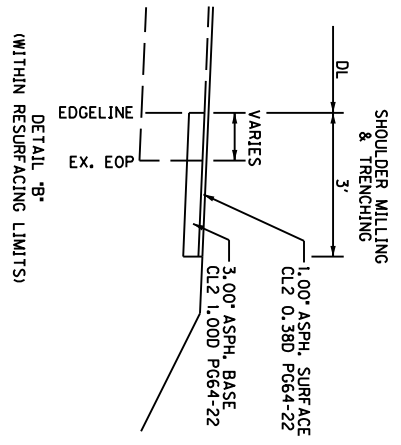
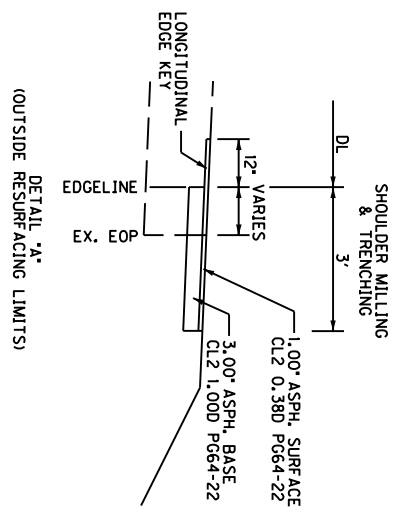


PAVEMENT WIDENING DETAIL

SEE PAVEMENT WIDENING SUMMARY SHEET FOR APPROXIMATE LOCATIONS

NOTE: RESURFACING LIMITS STA. 763+00 TO STA. 903+51.36

- ① 3:1 OR FLATTER IS DESIRABLE. LOCATIONS THAT ARE LIMITED DUE TO RIGHT-OF-WAY, UTILITY POLE, TREES, FENCES, OR OTHER SENSITIVE OBSTRUCTIONS MAY REQUIRE EMBANKMENT BUT ONLY OUT TO THE EDGE OF THE RIGHT-OF-WAY OR SENSITIVE OBSTRUCTIONS. (SLOPE MAY BE STEEPER THAN 3:1)
- ② A 2' SHOULDER IS DESIRABLE BUT MAY HAVE TO BE ELIMINATED IN ORDER TO REMAIN ON RIGHT-OF-WAY OR AVOID A SENSITIVE OBSTRUCTION.
- ③ FLATTEN DITCH BACKSLOPE WHEN POSSIBLE TO REMAIN IN RIGHT-OF-WAY. IN AREAS WHERE THE BACKSLOPE MUST REMAIN STEEP, THE ENGINEER MAY DETERMINE THAT CHANNEL LINING NEEDS TO BE INSTALLED TO STABILIZE THE BACKSLOPE.
- ④ SHOULDER EMBANKMENT MATERIAL SHALL BE SUITABLE FOR VEGETATION GROWTH.



ASPHALT OVERLAY SECTION WITH DITCHING AND SHOULDERING DETAIL

SEE DITCHING AND SHOULDERING SUMMARY FOR APPROXIMATE LOCATIONS OF PROPOSED DITCHING AND SHOULDERING WITH CHANNEL LINING NEEDS TO BE INSTALLED TO STABILIZE THE BACKSLOPE.

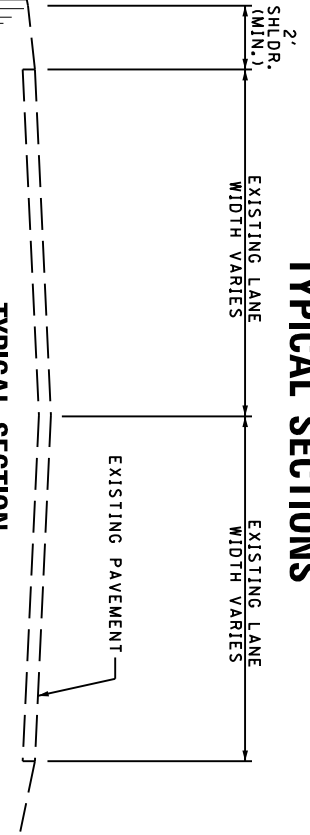
NOTE: RESURFACING LIMITS STA. 763+00 TO STA. 903+51.36

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- ③ FLATTEN DITCH BACKSLOPE WHEN POSSIBLE TO REMAIN IN RIGHT-OF-WAY. IN AREAS WHERE THE BACKSLOPE MUST REMAIN STEEP, THE ENGINEER MAY DETERMINE THAT CHANNEL LINING NEEDS TO BE INSTALLED TO STABILIZE THE BACKSLOPE.
- ④ SHOULDER EMBANKMENT MATERIAL SHALL BE SUITABLE FOR VEGETATION GROWTH.

NOT TO SCALE

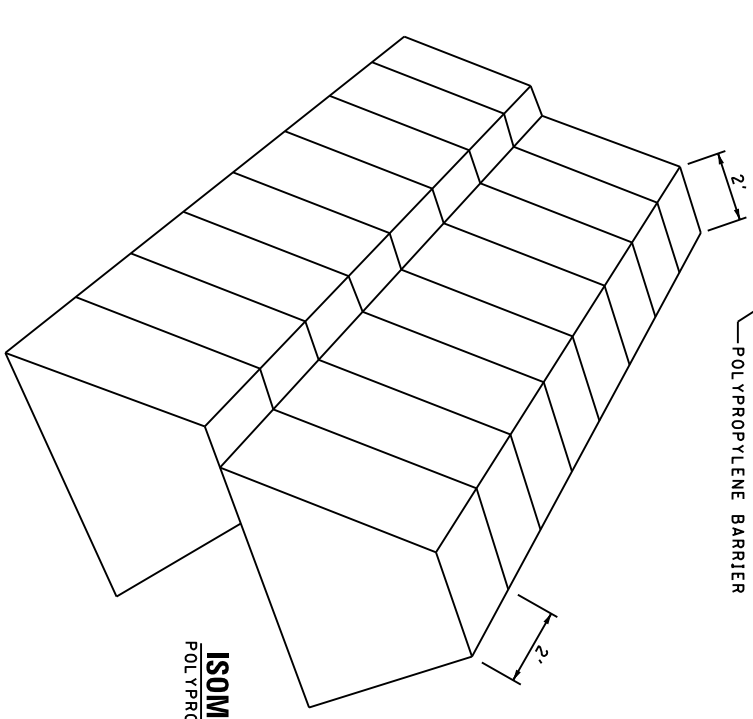
US 60
DITCHING AND SHOULDERING
PAVEMENT WIDENING

TYPICAL SECTIONS

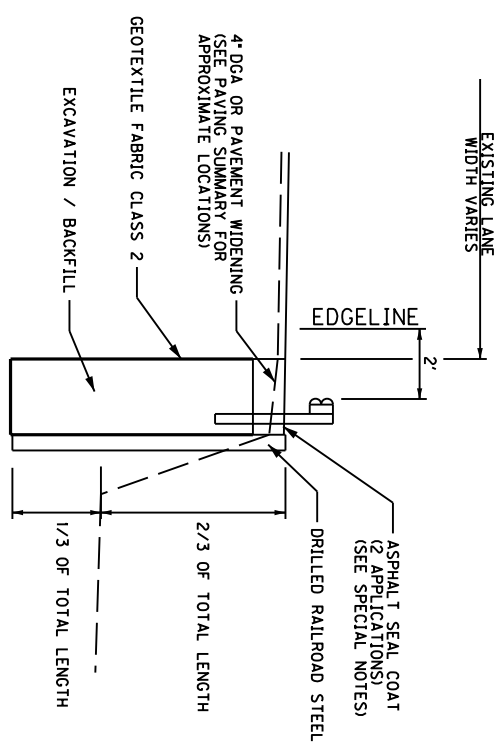


TYPICAL SECTION POLYPROPYLENE BARRIER

- ① SEE POLYPROPYLENE BARRIER WALL SUMMARY SHEET FOR APPROXIMATE HEIGHT AND QUANTITIES TO BE USED AT EACH LOCATION. THE ENGINEER WILL DETERMINE THE EXACT LIMITS AND WALL HEIGHTS AT THE TIME OF CONSTRUCTION.
- ② SEE SPECIAL NOTE FOR AGGREGATE BACKFILL REQUIREMENTS.
- ③ FILL PROPYLENE BARRIER WITH CONCRETE - CLASS B. SEE SPECIAL NOTE.



**ISOMETRIC VIEW
POLYPROPYLENE BARRIER**



CRIBBING DETAIL

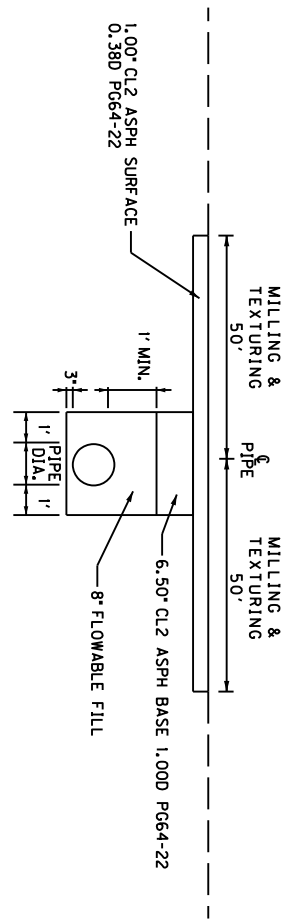
NOT TO SCALE

US 60
CRIBBING/POLYPROPYLENE
BARRIER WALL DETAILS

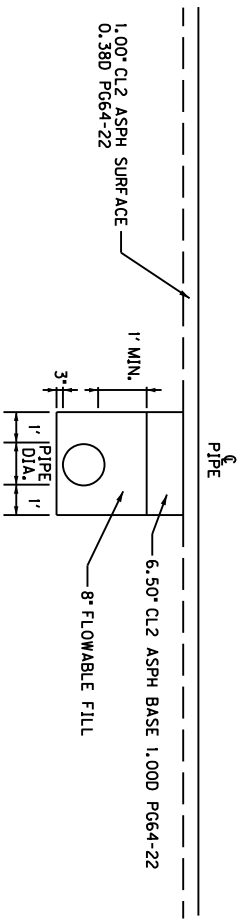
COUNTY OF	ITEM NO.
ROWAN	9-9008.00

COUNTY OF	ITEM NO.
ROWAN	9-9008.00

TYPICAL SECTIONS



FOR PIPES WHERE THE REMOVAL OF PIPE WILL REQUIRE PAVING OPERATIONS OUTSIDE RESURFACING LIMITS



FOR PIPES WHERE THE REMOVAL OF PIPE WILL REQUIRE PAVING OPERATIONS WITHIN RESURFACING LIMITS

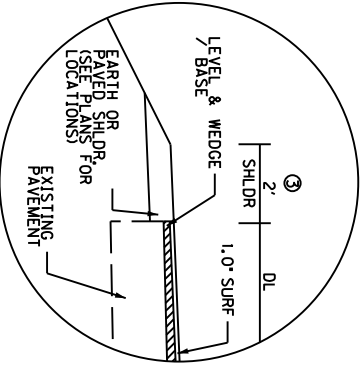
NOTE: RESURFACING LIMITS STA. 763+00 TO STA. 903+51.36

NOT TO SCALE

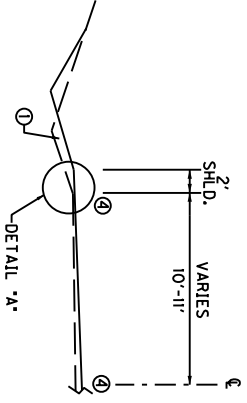
US 60
PIPE PAVING DETAIL

TYPICAL SECTIONS

COUNTY OF	ITEM NO.
ROWAN	9-9008.00

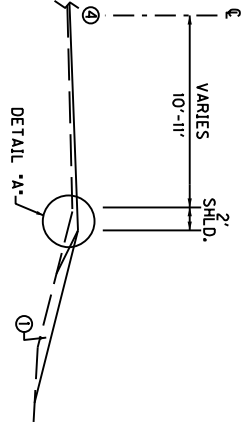


DETAIL 'A'



DETAIL 'A'

SUPERELEVATED SECTION CUT



DETAIL 'A'

SUPERELEVATED SECTION FILL

- STA. 617 + 01 TO STA. 626 + 09 (BOTH SIDES)
- STA. 723 + 53 TO STA. 727 + 72 (BOTH SIDES)
- STA. 742 + 87 TO STA. 750 + 35 (BOTH SIDES)
- STA. 831 + 25 TO STA. 837 + 50 (BOTH SIDES)

SUPERELEVATION IMPROVEMENTS

NOTE: RESURFACING LIMITS STA. 763+00 TO STA. 903+51.36

US 60 - SUPERELEVATION IMPROVEMENTS

- 1.0' SURFACE — CL2 ASPH SURF 0.38D PG64-22
- DEPTH VARIES — CL2 ASPH BASE 1.00D PG64-22
- DEPTH VARIES — LEVELING & WEDGING PG64-22

- ① COMPACTED EMBANKMENT (INCIDENTAL TO DITCHING & SHOULDERING). CONTRACTOR SHALL PROPERLY BENCH INTO EXISTING SLOPE AND APPLY PROPER COMPACTION. COMPACT MATERIAL ACCORDING TO STANDARD SPECIFICATIONS (SEC. 209). FINAL PAVEMENT WILL BE PAID AS IF OF DITCHING & SHOULDERING AND INCLUDE ALL WORK NECESSARY TO PERFORM WORK. SHOULDER EMBANKMENT MATERIAL SHALL BE SUITABLE FOR VEGETATION GROWTH. LOCATIONS THAT ARE LIMITED DUE TO R/W, UTILITY POLES, TREES, FENCES, OR OTHER SENSITIVE OBSTRUCTIONS MAY REQUIRE EMBANKMENT BUT ONLY OUT TO THE EDGE OF R/W OR SENSITIVE OBSTRUCTIONS). (SLOPE MAY BE STEEPER THAN 3:1)
- ② EXCAVATION TO ACHIEVE THE PROPOSED DITCHES IS INCIDENTAL TO THE BID ITEM DITCHING & SHOULDERING.
- ③ DESIRABLE 2' PAVED SHOULDER (SEE PAVEMENT WIDENING SUMMARY SHEET FOR LOCATIONS)
- ④ LONGITUDINAL EDGE KEYS REQUIRED ALONG CENTERLINE AND INSIDE EDGE OF PAVEMENT WHEN BOTH LANES RECEIVE SUPERELEVATION IMPROVEMENTS.

NOT TO SCALE

US 60
SUPERELEVATION IMPROVEMENTS
DETAILS



**BEGIN PROJECT
STA. 572+03.52
MP 10.834**

GUARDRAIL REMOVAL (RT.)
STA. 572+55 TO STA. 574+82
(REMOVED) 237.5 LF OF GUARDRAIL
STA. 575+00 TO STA. 576+64
(REMOVED) 175 LF OF GUARDRAIL

BEGIN STATION	END STATION	TERM. SEC.	TREAT. TY 1	END STATION	TERM. SEC.	TREAT. SF A	NO. 1	LENGTH
572+55	574+82	--	--	574+82	--	--	--	162.5'
575+00	576+64	--	--	576+64	--	--	--	157.5'

GUARDRAIL REMOVAL (LT.)
STA. 574+72 TO STA. 574+82
(REMOVED) 12.5 LF OF GUARDRAIL
STA. 575+00 TO STA. 575+11
(REMOVED) 12.5 LF OF GUARDRAIL

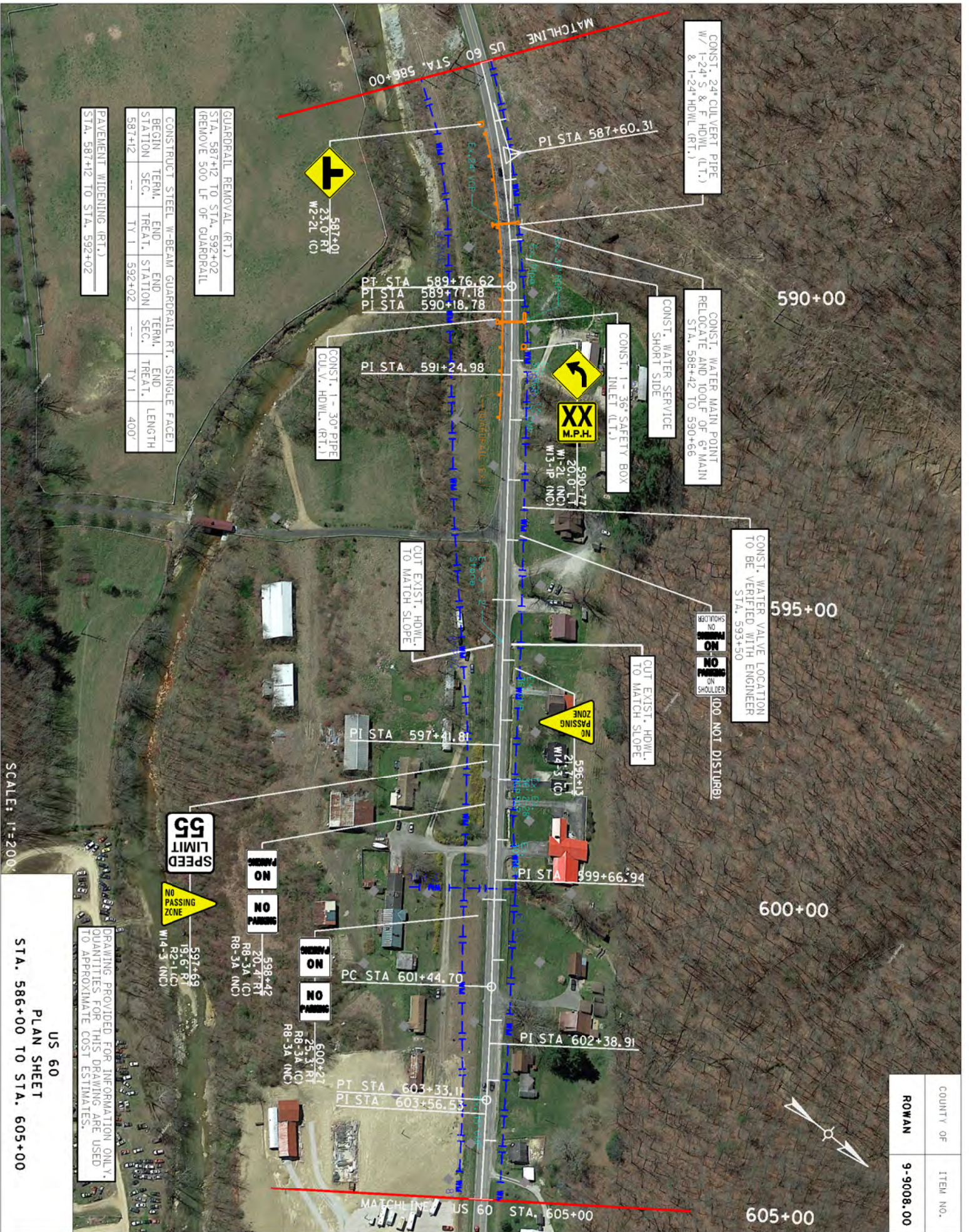
BEGIN STATION	END STATION	TERM. SEC.	TREAT. NO. 1	END STATION	TERM. SEC.	TREAT. SF A	NO. 1	LENGTH
574+72	574+82	--	--	574+82	--	--	--	2.5'
575+00	575+11	--	--	575+11	--	--	--	2.5'

COUNTY OF	ITEM NO.
ROWAN	9-9008.00

SCALE: 1"=200'

US 60
PLAN SHEET
STA. 572+03.52 TO STA. 586+00

DRAWING PROVIDED FOR INFORMATION ONLY.
QUANTITIES FOR THIS DRAWING ARE USED
TO APPROXIMATE COST ESTIMATES.



BEGIN STATION	END STATION	TERM. SEC.	TREAT.	TY I	LENGTH
587+12	592+02	--	--	1	400'

PAVEMENT WIDENING (RT.)
STA. 587+12 TO STA. 592+02

BEGIN STATION	END STATION	TERM. SEC.	TREAT.	TY I	LENGTH
587+12	592+02	--	--	1	400'

CONSTRUCT STEEL W-BEAM GUARDRAIL RT. (SINGLE FACE)
GUARDRAIL REMOVAL (RT.)
STA. 587+12 TO STA. 592+02
(REMOVE 500 LF OF GUARDRAIL)

BEGIN STATION	END STATION	TERM. SEC.	TREAT.	TY I	LENGTH
597+69	599+42	--	--	1	173'

NO PASSING ZONE
W4-5 (INC)

BEGIN STATION	END STATION	TERM. SEC.	TREAT.	TY I	LENGTH
598+42	600+27	--	--	1	185'

NO PASSING ZONE
R8-3A (C)
R8-3A (NC)

BEGIN STATION	END STATION	TERM. SEC.	TREAT.	TY I	LENGTH
600+27	603+56	--	--	1	329'

NO PASSING ZONE
R8-3A (C)
R8-3A (NC)

BEGIN STATION	END STATION	TERM. SEC.	TREAT.	TY I	LENGTH
603+56	605+00	--	--	1	144'

NO PASSING ZONE
R8-3A (C)
R8-3A (NC)

SCALE: 1"=200'

US 60
PLAN SHEET
STA. 586+00 TO STA. 605+00

DRAWING PROVIDED FOR INFORMATION ONLY. QUANTITIES FOR THIS DRAWING ARE USED TO APPROXIMATE COST ESTIMATES.

COUNTY OF	ITEM NO.
ROWAN	9-9008.00



COUNTY OF	ITEM NO.
ROWAN	9-9008.00

SUPERELEVATION IMPROVEMENT
STA. 617+01 TO STA. 624+00
ADJUST SUPER AND OVERLAY

CONST. WATER MAIN POINT
RELOCATE AND SHORT SERVICE
STA. 610+33 TO 610+93

CONST. WATER VALVE, 200LF OF
6" MAIN AND SHORT SERVICE
APPROX. STA. 614+50

CONST. WATER MAIN
POINT RELOCATE
STA. 615+49 TO 615+79

CONST. 18" SAFETY
BOX INLET

CONST. WATER MAIN POINT RELOCATE
AND 100 LF OF 6" PVC PIPE
STA. 623+69 TO 624+29

CONST. 18" JUNCTION BOX W/
2 - 18" METAL END SECTIONS

CONST. 1-18"
STD. HOWL

CONST. 1-18"
STD. HOWL

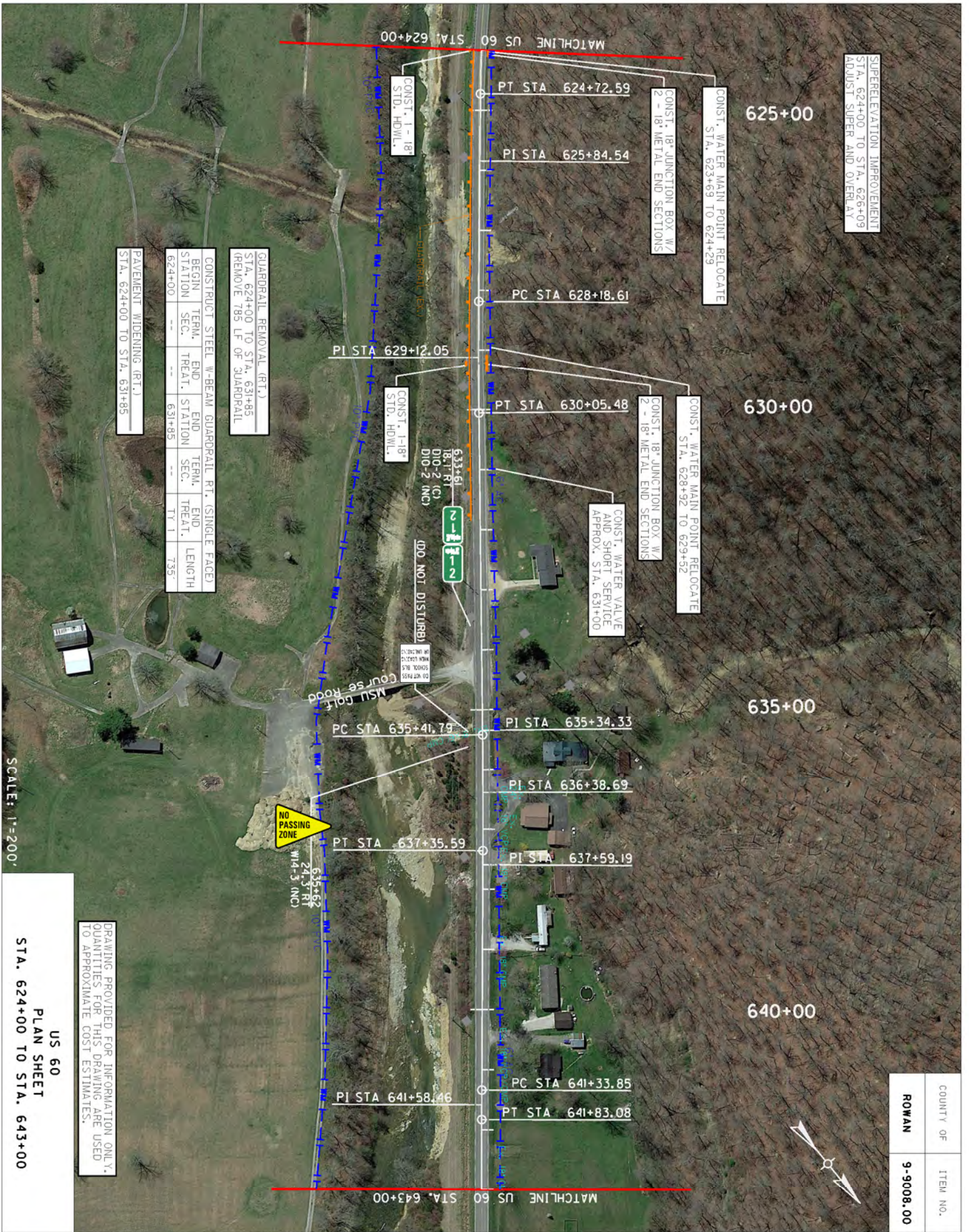
CONST. 30" CULVERT PIPE W/
1-36" SAFETY BOX INLET (L.T.) &
1-30" SLOPED & MITERED (RT.)

GUARDRAIL REMOVAL (RT.)	STA. 613+10 TO STA. 624+00 (REMOVE 1,090 LF OF GUARDRAIL)			
CONSTRUCT STEEL W-BEAM GUARDRAIL RT. (SINGLE FACE)				
BEGIN STATION	END STATION	TERM. TREAT.	TERM. TREAT.	LENGTH
613+10	624+00	--	--	1,097.5'
PAVEMENT WIDENING (RT.)				
STA. 613+10 TO STA. 624+00				

DRAWING PROVIDED FOR INFORMATION ONLY.
QUANTITIES FOR THIS DRAWING ARE USED
TO APPROXIMATE COST ESTIMATES.

SCALE: 1"=200'

US 60
PLAN SHEET
STA. 605+00 TO STA. 624+00



SUPERELEVATION IMPROVEMENT
STA. 624+00 TO STA. 626+09
ADJUST SUPER AND OVERLAY

CONSTR. WATER MAIN POINT RELOCATE
STA. 623+69 TO 624+29

CONSTR. 18" JUNCTION BOX W/
2 - 18" METAL END SECTIONS

GUARDRAIL REMOVAL (RT.)
STA. 624+00 TO STA. 631+85
(REMOVE 785 LF OF GUARDRAIL)

BEGIN STATION	TERM. STATION	END TREAT.	END TREAT.	TR	LENGTH
624+00	631+85	---	---	TR 1	735'

PAVEMENT WIDENING (RT.)
STA. 624+00 TO STA. 631+85

CONSTR. WATER MAIN POINT RELOCATE
STA. 628+92 TO 629+52

CONSTR. WATER VALVE
AND SHORT SERVICE
APPROX. STA. 631+00

CONSTR. 1-18"
STD. HDWL.

633+61
18" RT
DIO-2 (C)
DIO-2 (NC)

(DO NOT DISTURB)

NO SOIL RE-
MOVAL
OR
REPLACEMENT

MSU Golf Course Road

NO PASSING ZONE

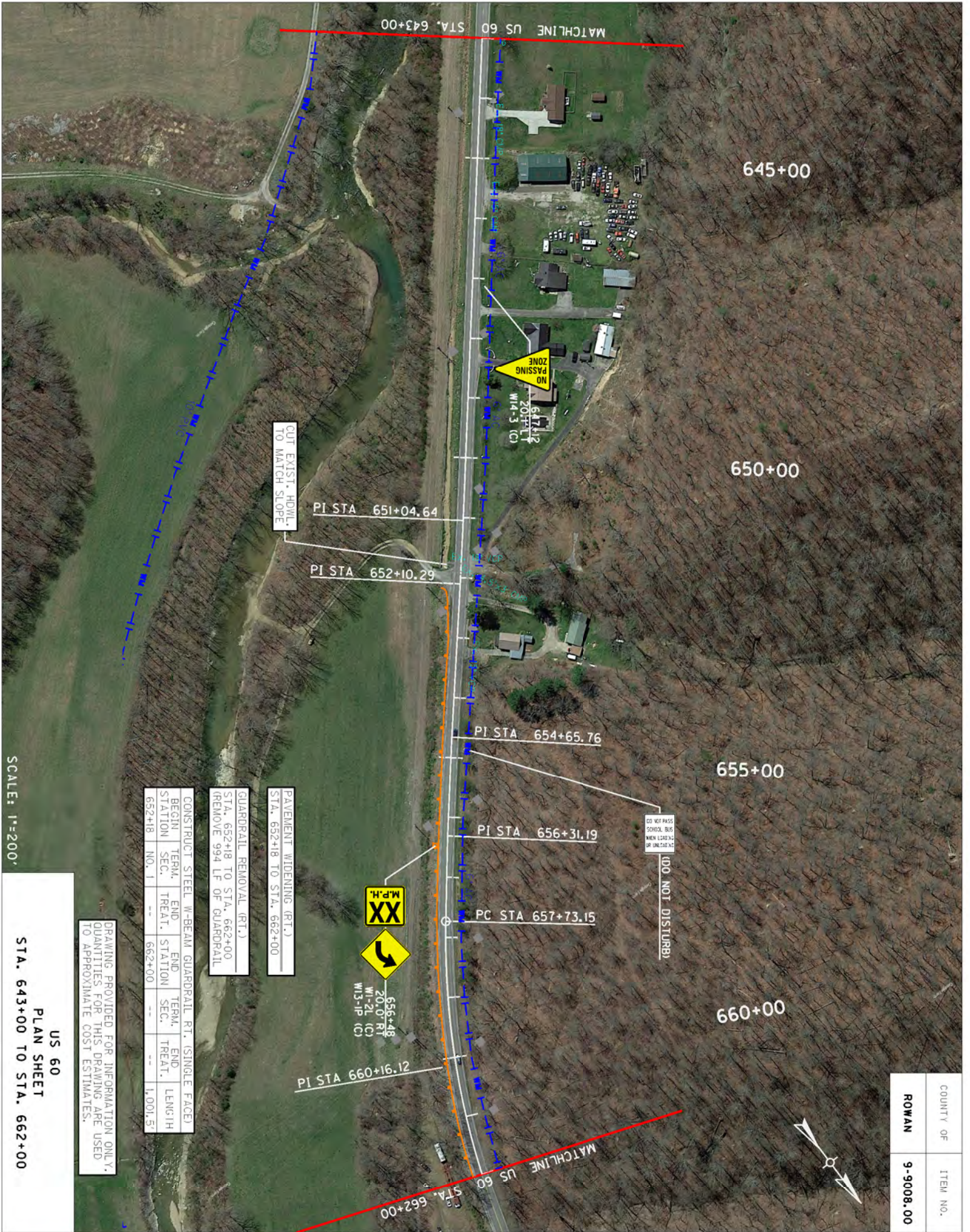
635+62
24.3' RT
W14-3 (NC)

COUNTY OF	ITEM NO.
ROWAN	9-9008.00

DRAWING PROVIDED FOR INFORMATION ONLY.
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TO APPROXIMATE COST ESTIMATES.

SCALE: 1"=200'

US 60
PLAN SHEET
STA. 624+00 TO STA. 643+00



COUNTY OF	ROWAN
ITEM NO.	9-9008.00

DO NOT PASS SCHOOL BUS WHEN FLASHING RED LIGHTS OR UNLIT

DO NOT DISTURB

662+48
20.0' RT
W1-2L (C)
W13-1P (C)

660+16.12
PI STA

657+73.15
PC STA

656+31.19
PI STA

654+65.76
PI STA

652+10.29
PI STA

651+04.64
PI STA

CUT EXIST. HDWL. TO MATCH SLOPE

647+12
20.0' RT
W14-3 (C)

NO PASSING ZONE

645+00

650+00

655+00

660+00

BEGIN STATION	TERM. SEC.	END STATION	TERM. SEC.	TREAT.	NO.	LENG: FT
652+18	--	662+00	--		1	1,001.5

CONSTRUCT STEEL W-BEAM GUARDRAIL RT. (SINGLE FACE)

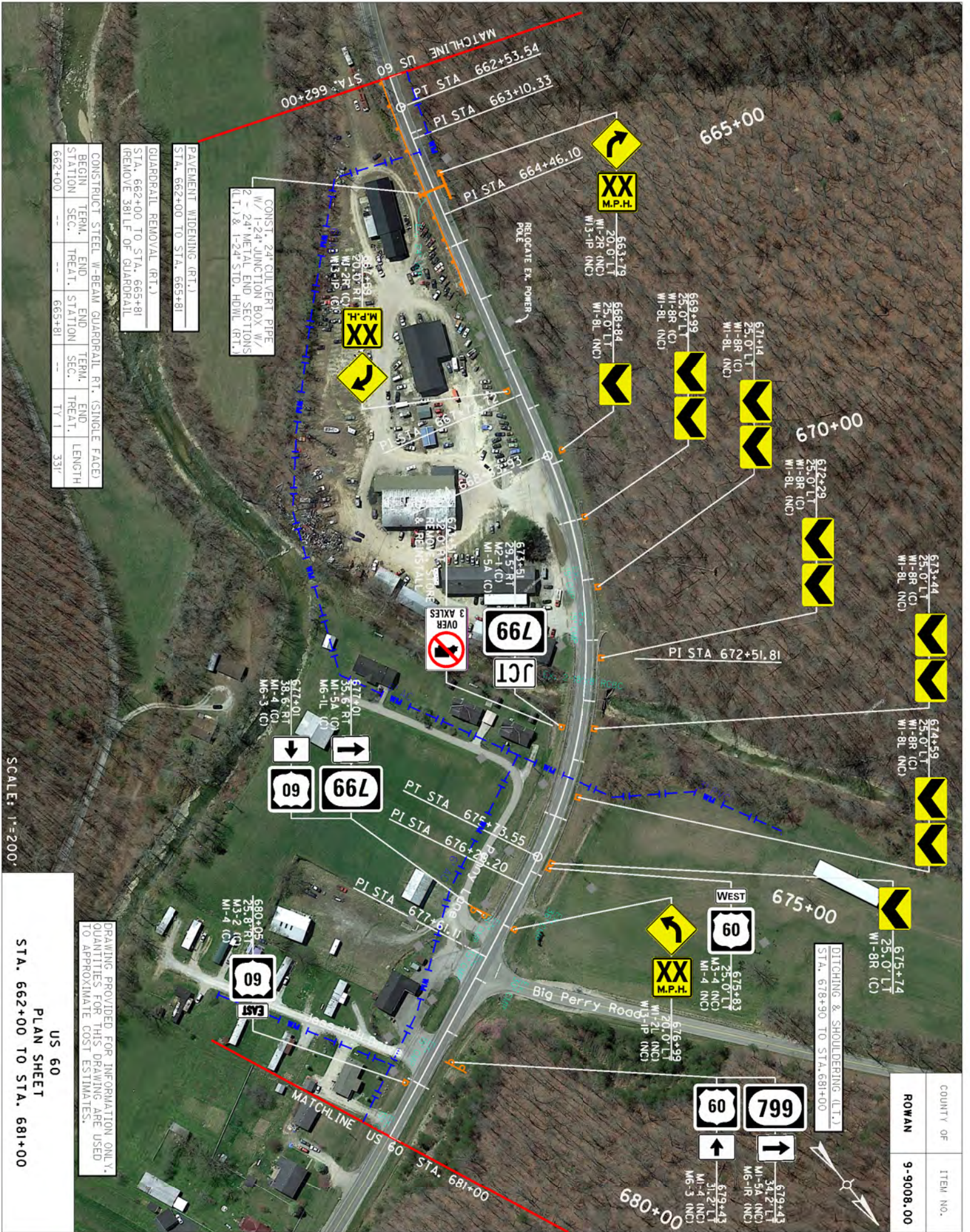
GUARDRAIL REMOVAL (RT.) STA. 652+18 TO STA. 662+00 (REMOVE 994 LF OF GUARDRAIL)

PAVEMENT WIDENING (RT.) STA. 652+18 TO STA. 662+00

SCALE: 1"=200'

US 60
PLAN SHEET
STA. 643+00 TO STA. 662+00

DRAWING PROVIDED FOR INFORMATION ONLY. QUANTITIES FOR THIS DRAWING ARE USED TO APPROXIMATE COST ESTIMATES.



PAVEMENT WIDENING (RT.)					
STA.	662+00	TO	STA.	665+81	
GUARDRAIL REMOVAL (RT.)					
STA.	662+00	TO	STA.	665+81	
REMOVE 381 LF OF GUARDRAIL					
CONSTRUCT STEEL W-BEAM GUARDRAIL RT. (SINGLE FACE)					
BEGIN STATION	TERM. STATION	TREAT.	END TREAT.	LENGTH	TY. 1
662+00	665+81	--	665+81	331'	331'

CONSTR. 24" CULVERT PIPE W/ 1-24" JUNCTION BOX W/ 2 - 24" METAL END SECTIONS (L.T.) & 1-24" STD. HDWL (RT.)

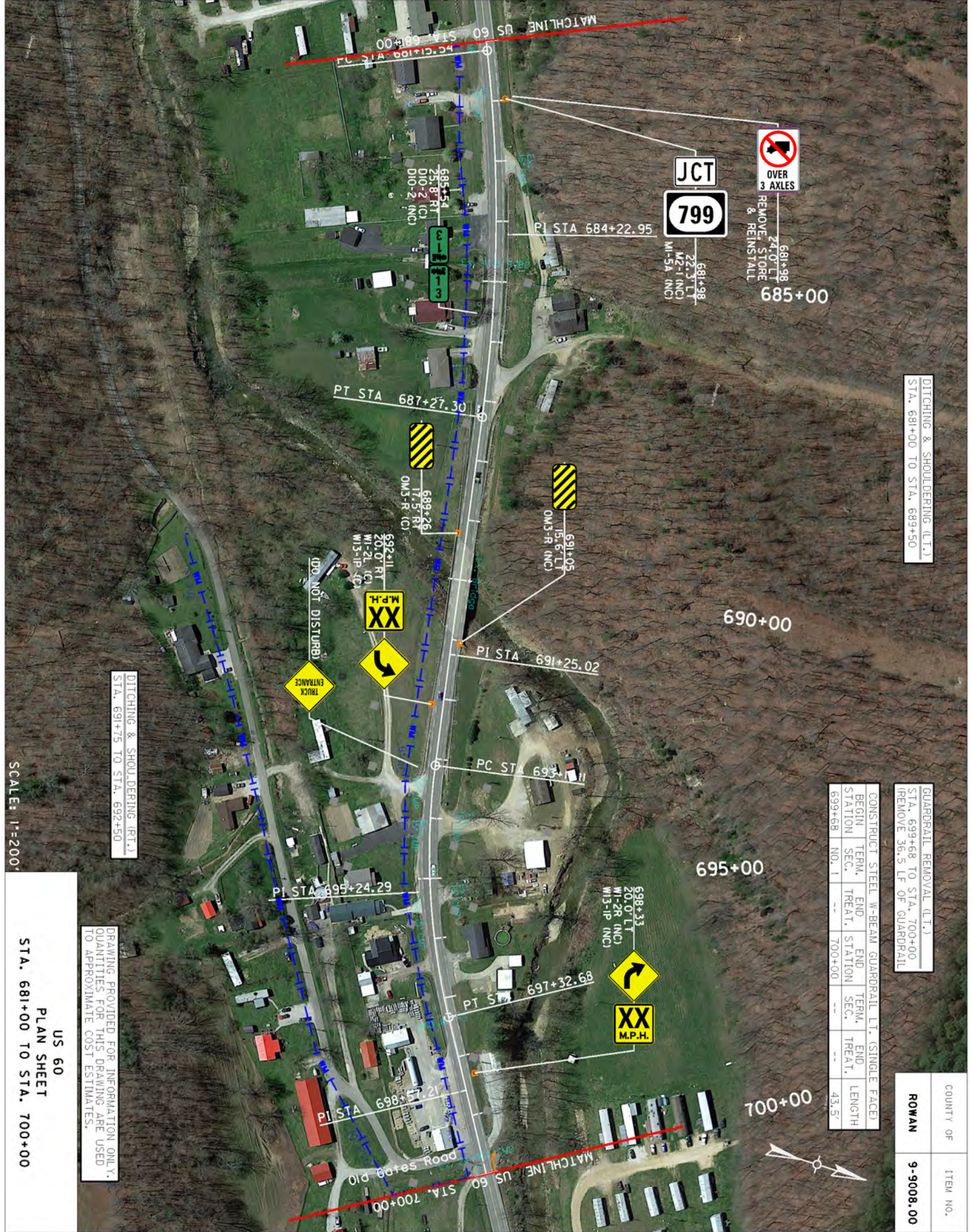
SCALE: 1"=200'

US 60
PLAN SHEET
STA. 662+00 TO STA. 681+00

DRAWING PROVIDED FOR INFORMATION ONLY. QUANTITIES FOR THIS DRAWING ARE USED TO APPROXIMATE COST ESTIMATES.

DITCHING & SHOULDERING (L.T.)
STA. 618+90 TO STA. 681+00

COUNTY OF	ROWAN
ITEM NO.	9-9008.00



DITCHING & SHOULDERING (L.T.)
STA. 681+00 TO STA. 689+50

DITCHING & SHOULDERING (R.T.)
STA. 691+75 TO STA. 692+50

GUARDRAIL REMOVAL (L.T.)
STA. 699+68 TO STA. 700+00
(REMOVE 36.5 LF OF GUARDRAIL)

BEGIN STATION	TERM. SEC.	END STATION	TERM. SEC.	LENGTH
699+68	NO. 1	700+00	--	43.5'

COUNTY OF	ITEM NO.
ROWAN	9-9008.00

DRAWING PROVIDED FOR INFORMATION ONLY.
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US 60
PLAN SHEET
STA. 681+00 TO STA. 700+00

SCALE: 1"=200'

GUARDRAIL REMOVAL (L.T.)
STA. 700+00 TO STA. 704+01
(REMOVE 401 LF OF GUARDRAIL)

CONSTRUCT	TERM.	END	END	TERM.	END	LENGTH
STATION	STATION	STATION	STATION	TREAT.	TREAT.	
700+00	--	--	704+01	--	TY 1	351.5'

COUNTY OF	ITEM NO.
ROWAN	9-9008.00



DITCHING & SHOULDERING (RT.)
STA. 713+69 TO STA. 715+93

705+77
17.3' RT
W4-3 (NC)
NO PASSING ZONE

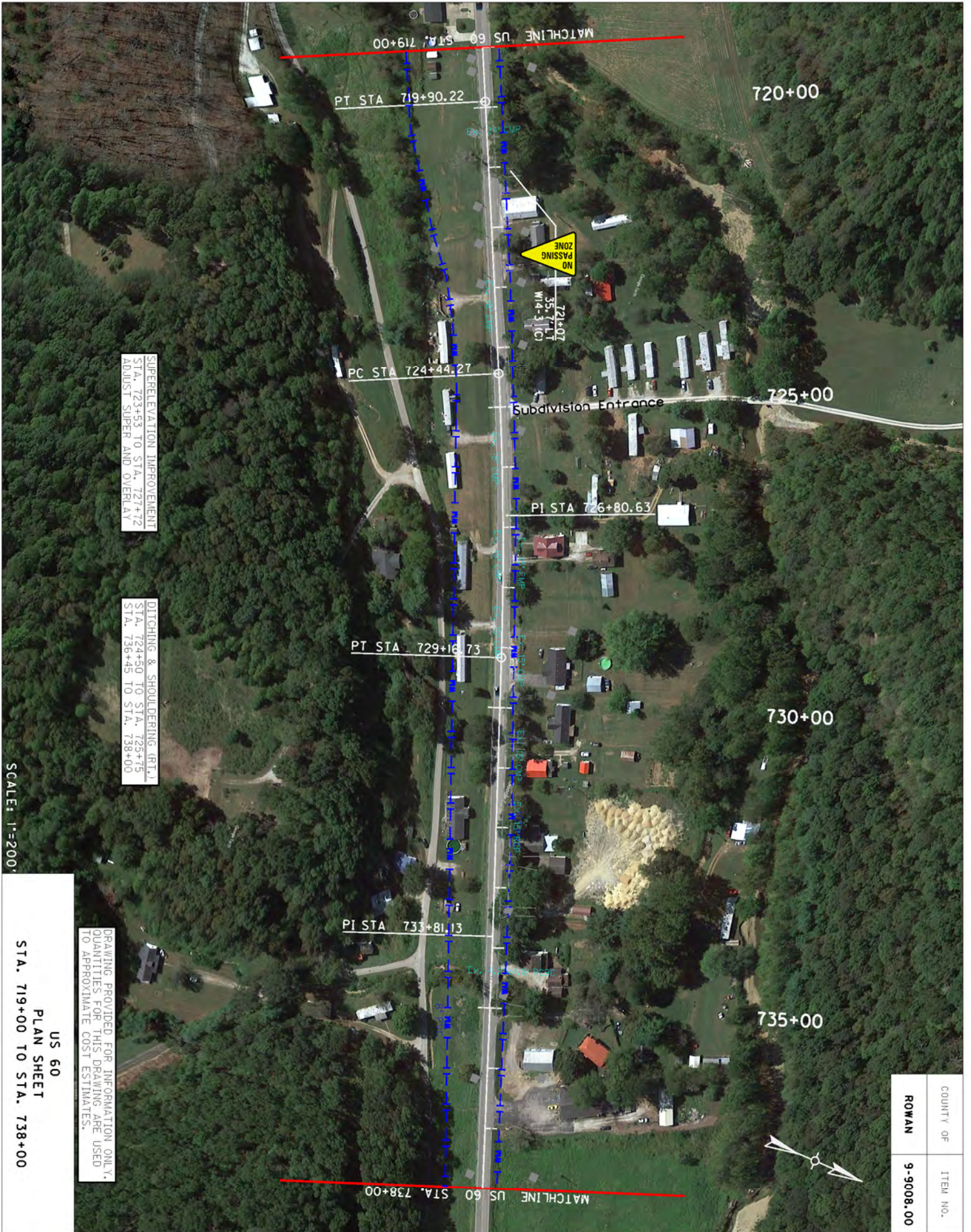
Hamilton Rd
706+90
20.0' RT
W2-2L (C)
W16-8P (C)

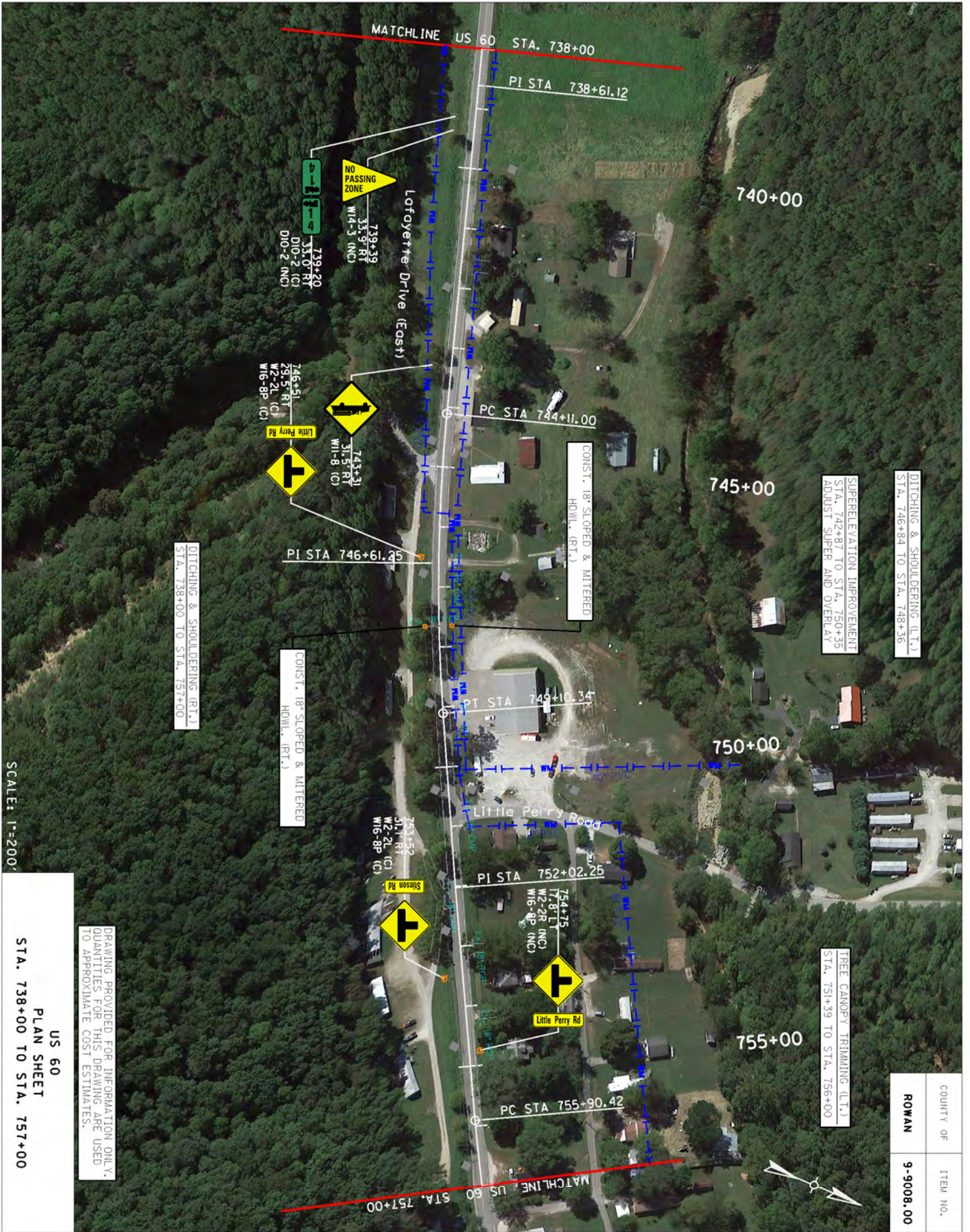
Hamilton Rd
714+39
20.0' LT
W2-2R (NC)
W16-8P (NC)

SCALE: 1"=200'

US 60
PLAN SHEET
STA. 700+00 TO STA. 719+00

DRAWING PROVIDED FOR INFORMATION ONLY.
QUANTITIES FOR THIS DRAWING ARE USED
TO APPROXIMATE COST ESTIMATES.





SCALE: 1"=200'

DRAWING PROVIDED FOR INFORMATION ONLY.
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 TO APPROXIMATE COST ESTIMATES.

US 60
 PLAN SHEET
 STA. 738+00 TO STA. 757+00

DITCHING & SHOULDERING (L.T.)
 STA. 746+84 TO STA. 748+36

SUPERELEVATION IMPROVEMENT
 STA. 742+87 TO STA. 750+35
 ADJUST SUPER AND OVERLAY

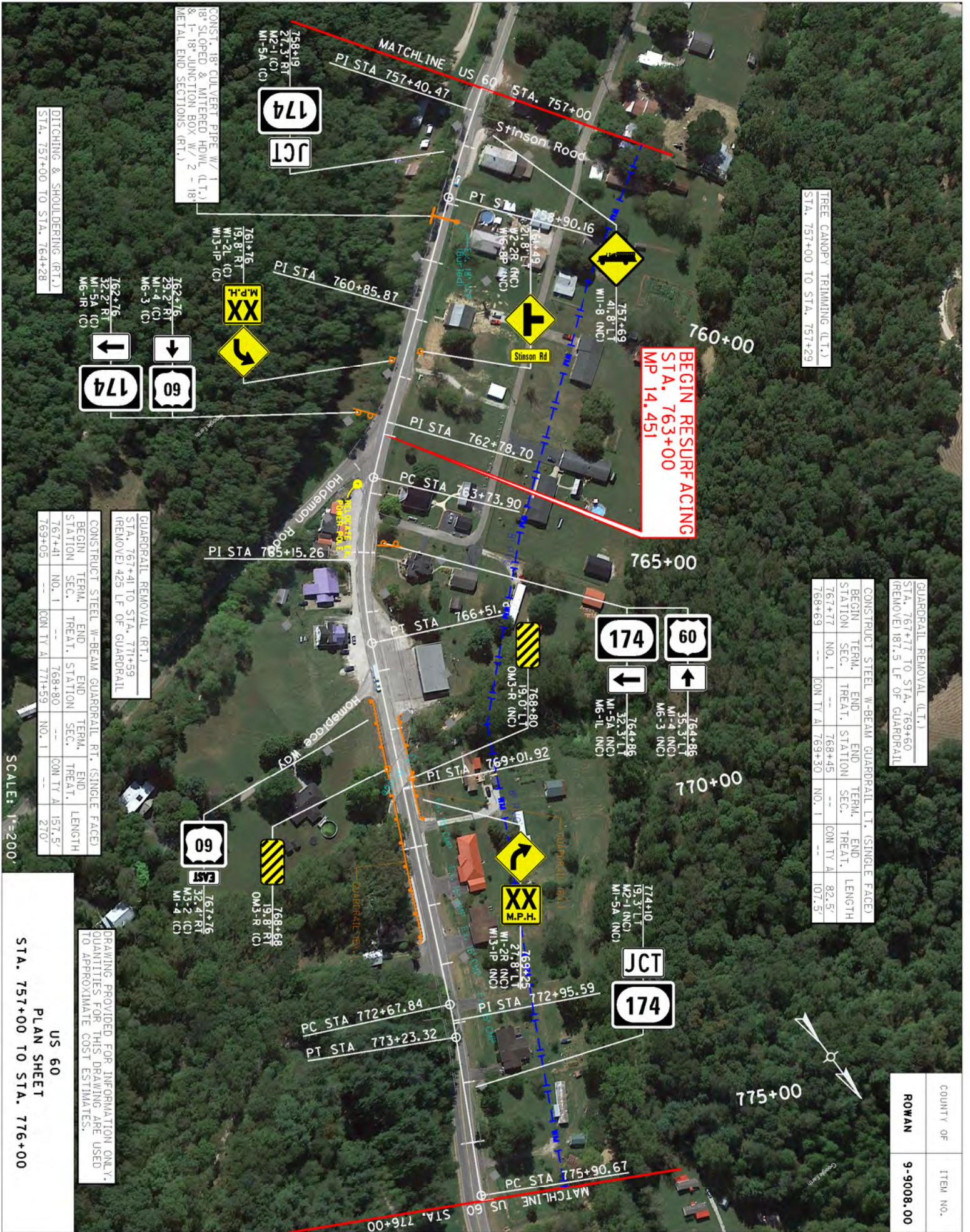
CONST. 18° SLOPED & MITERED
 HDWL., (RT.)

CONST. 18° SLOPED & MITERED
 HDWL., (RT.)

DITCHING & SHOULDERING (RT.)
 STA. 738+00 TO STA. 757+00

TREE CANOPY TRIMMING (L.T.)
 STA. 751+39 TO STA. 756+00

COUNTY OF	ROWAN
ITEM NO.	9-9008.00



TREE CANOPY TRIMMING (L.T.)
STA. 757+00 TO STA. 757+29

**BEGIN RESURFACING
STA. 763+00
MP 14.451**

GUARDRAIL REMOVAL (L.T.)
STA. 767+77 TO STA. 769+60
(REMOVED) 187.5 LF OF GUARDRAIL

BEGIN STATION	TERM. STATION	NO. 1	CON TY A	END STATION	TERM. STATION	NO. 1	CON TY A	LENGTH
767+77	769+60	--	--	768+45	769+30	--	--	82.5'
768+69	--	--	--	769+30	771+59	--	--	107.5'

GUARDRAIL REMOVAL (R.T.)
STA. 767+41 TO STA. 771+59
REMOVED 425 LF OF GUARDRAIL

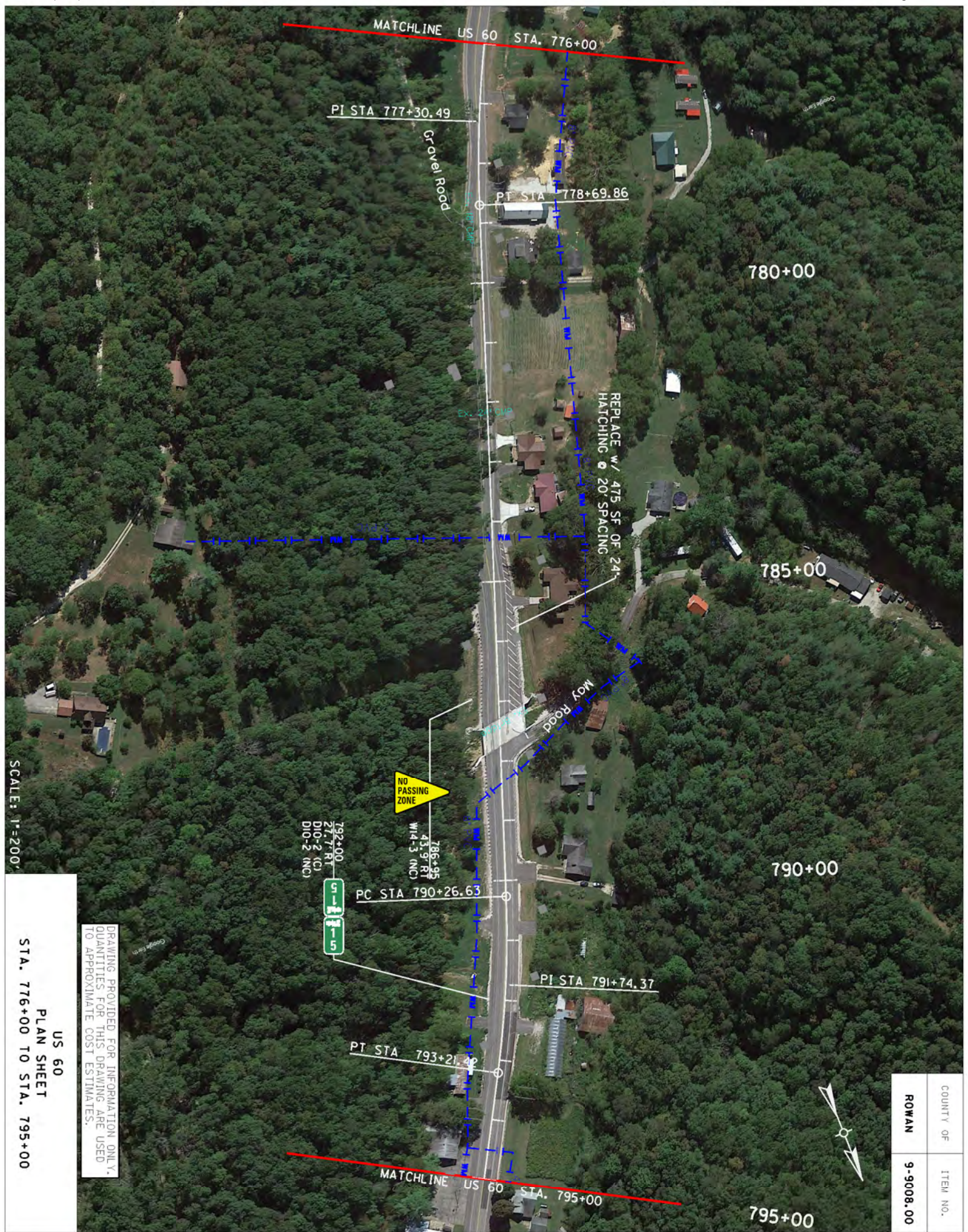
BEGIN STATION	TERM. STATION	NO. 1	CON TY A	END STATION	TERM. STATION	NO. 1	CON TY A	LENGTH
767+41	771+59	--	--	768+80	771+59	--	--	157.5'
769+05	--	--	--	771+59	774+28	--	--	270'

DRAWING PROVIDED FOR INFORMATION ONLY.
QUANTITIES FOR THIS DRAWING ARE USED
TO APPROXIMATE COST ESTIMATES.

US 60
PLAN SHEET
STA. 757+00 TO STA. 776+00

COUNTY OF	ITEM NO.
ROWAN	9-9008.00

SCALE: 1"=200'

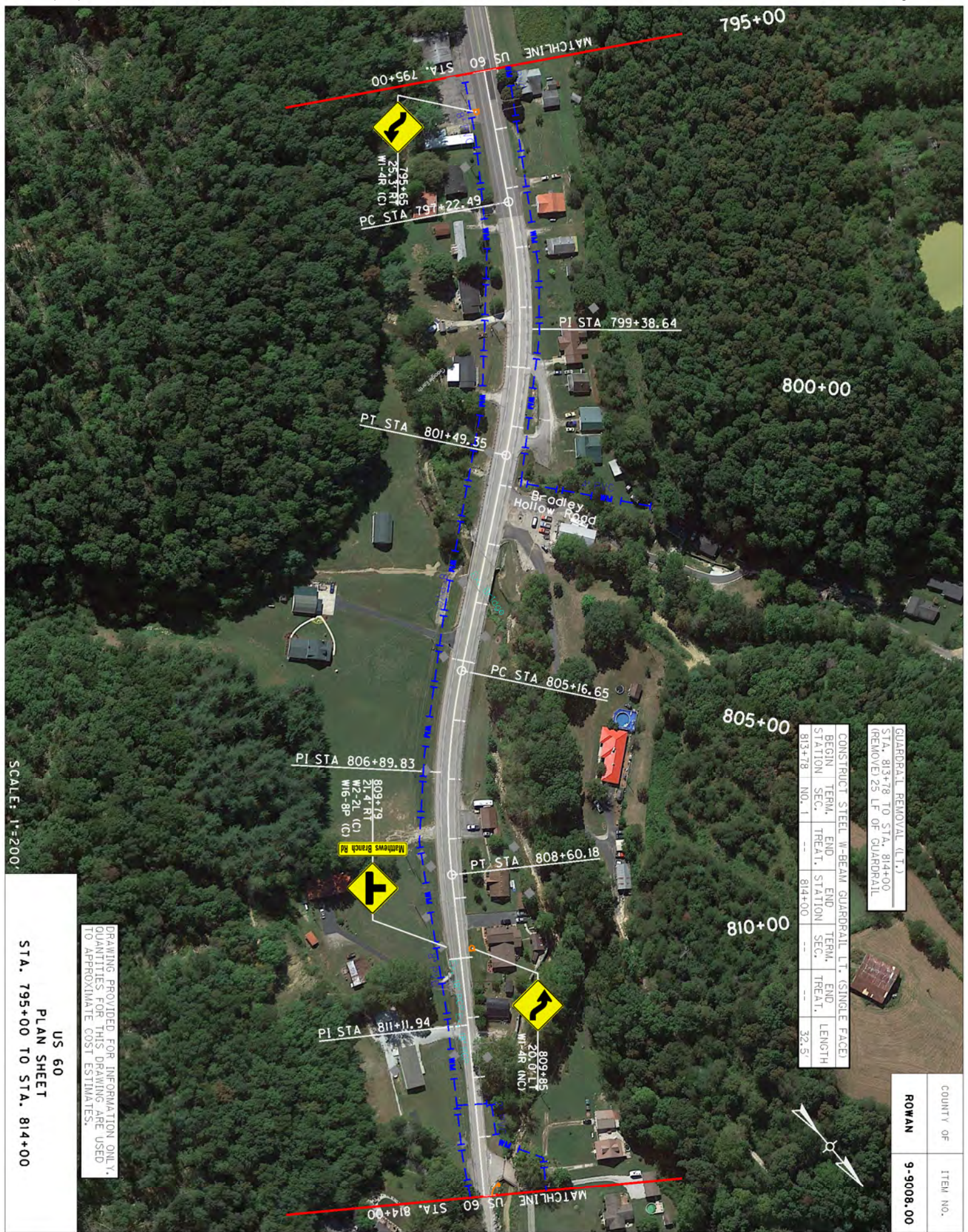


SCALE: 1"=200'

DRAWING PROVIDED FOR INFORMATION ONLY.
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US 60
PLAN SHEET
STA. 776+00 TO STA. 795+00

COUNTY OF	ROWAN
ITEM NO.	9-9008.00



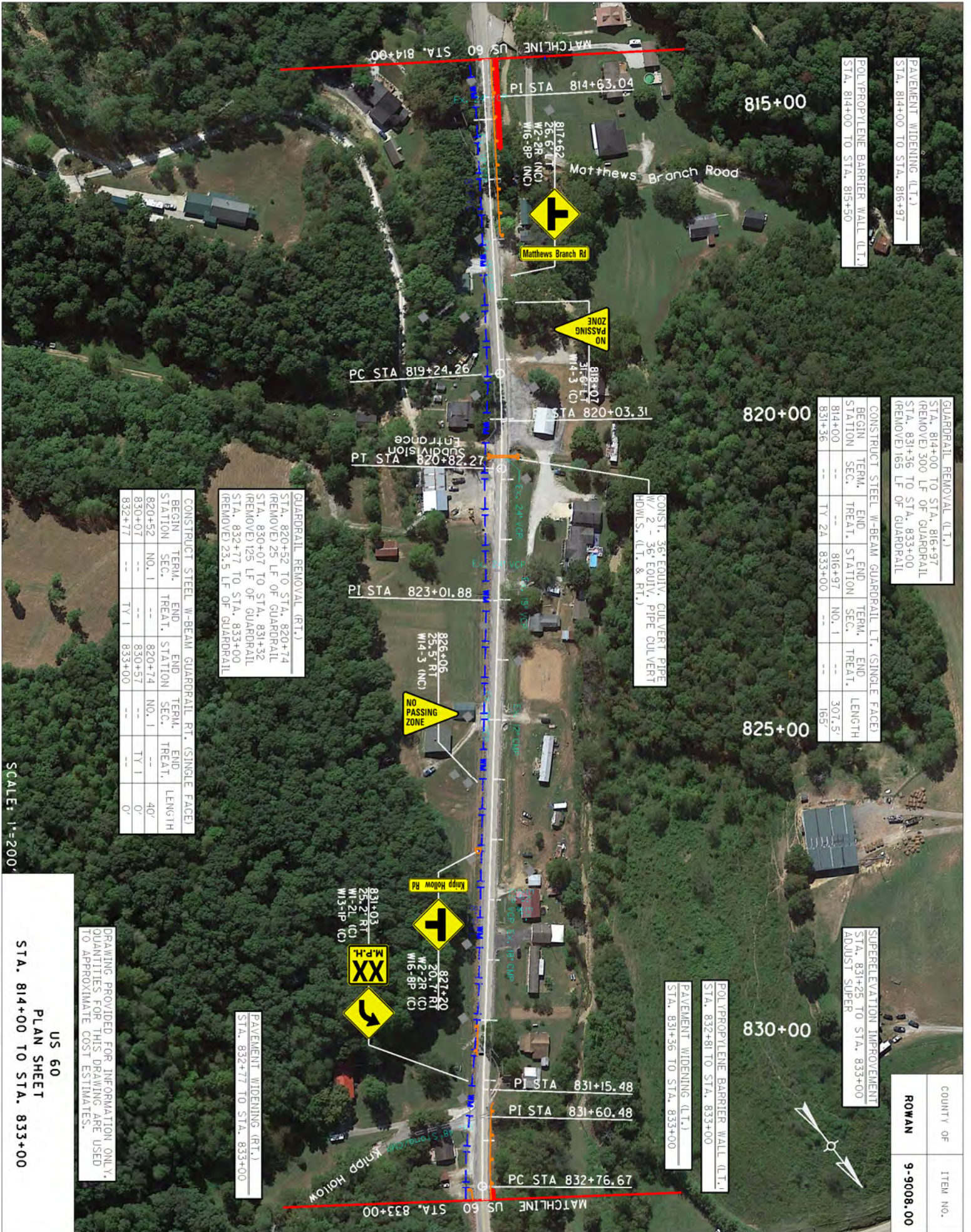
GUARDRAIL REMOVAL (L.I.)		CONSTRUCT STEEL W-BEAM GUARDRAIL LT. (SINGLE FACE)	
BEGIN STATION	END STATION	BEGIN STATION	END STATION
813+78	814+00	813+78	814+00
REMOVE 25' LF OF GUARDRAIL			

COUNTY OF	ROWAN
ITEM NO.	9-9008.00

DRAWING PROVIDED FOR INFORMATION ONLY.
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US 60
PLAN SHEET
STA. 795+00 TO STA. 814+00

SCALE: 1"=200'



BEGIN STATION	TERM. SEC.	END STATION	TERM. SEC.	LENGTH
820+52	NO. 1	820+74	NO. 1	40'
830+07	--	830+57	TY 1	0'
832+77	--	833+00	--	0'

GUARDRAIL REMOVAL (R.T.)
STA. 820+52 TO STA. 820+74
(REMOVE) 25 LF OF GUARDRAIL
STA. 830+07 TO STA. 831+32
(REMOVE) 125 LF OF GUARDRAIL
STA. 832+77 TO STA. 833+00
(REMOVE) 23.5 LF OF GUARDRAIL

CONSTR. 36\"/>

BEGIN STATION	TERM. SEC.	END STATION	TERM. SEC.	LENGTH
814+00	--	816+97	NO. 1	307.5'
831+36	--	TY 2A	833+00	165'

GUARDRAIL REMOVAL (L.T.)
STA. 814+00 TO STA. 816+97
(REMOVE) 300 LF OF GUARDRAIL
STA. 831+36 TO STA. 833+00
(REMOVE) 165 LF OF GUARDRAIL

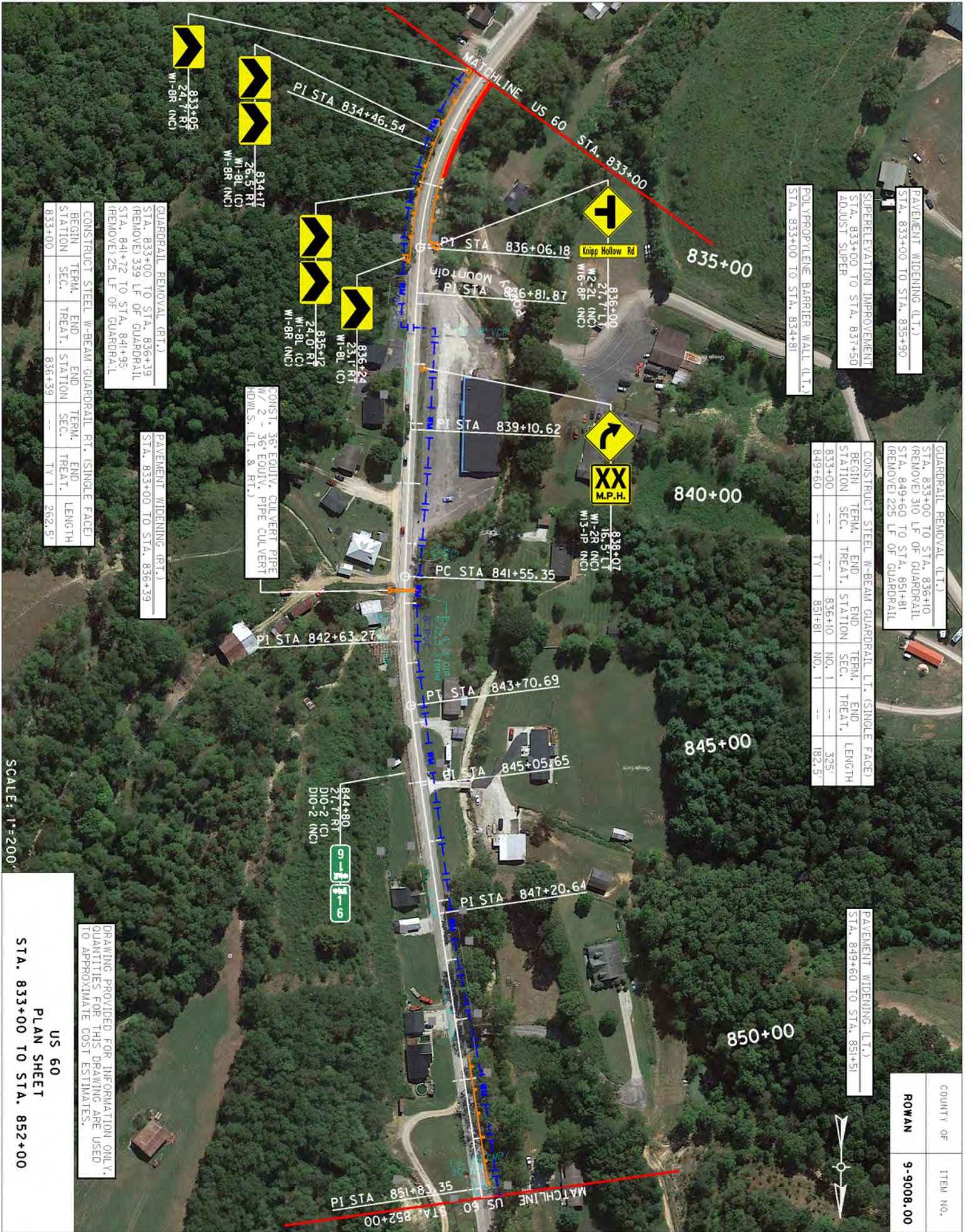
SUPERELEVATION IMPROVEMENT
STA. 831+25 TO STA. 833+00
ADJUST SUPER

COUNTY OF	ITEM NO.
ROWAN	9-9008.00

SCALE: 1"=200'

US 60
PLAN SHEET
STA. 814+00 TO STA. 833+00

DRAWING PROVIDED FOR INFORMATION ONLY. QUANTITIES FOR THIS DRAWING ARE USED TO APPROXIMATE COST ESTIMATES.



PAVEMENT WIDENING (L.T.)
STA. 833+00 TO STA. 835+90

SUPERELEVATION IMPROVEMENT
STA. 833+00 TO STA. 837+50
ADJUST SUPER

POLYPROPYLENE BARRIER WALL (L.T.)
STA. 833+00 TO STA. 834+81

GUARDRAIL REMOVAL (L.T.)		CONSTRUCT STEEL W-BEAM GUARDRAIL L.T. (SINGLE FACE)	
BEGIN STATION	END STATION	BEGIN STATION	END STATION
833+00	836+39	833+00	852+00
REMOVE 310 LF OF GUARDRAIL STA. 833+00 TO STA. 836+39		REMOVE 225 LF OF GUARDRAIL STA. 833+00 TO STA. 852+00	
REMOVE 225 LF OF GUARDRAIL STA. 833+00 TO STA. 836+39		TY 1	
		NO. 1	182.5'

PAVEMENT WIDENING (L.T.)
STA. 849+60 TO STA. 851+51

COUNTY OF	ROWAN
ITEM NO.	9-9008.00

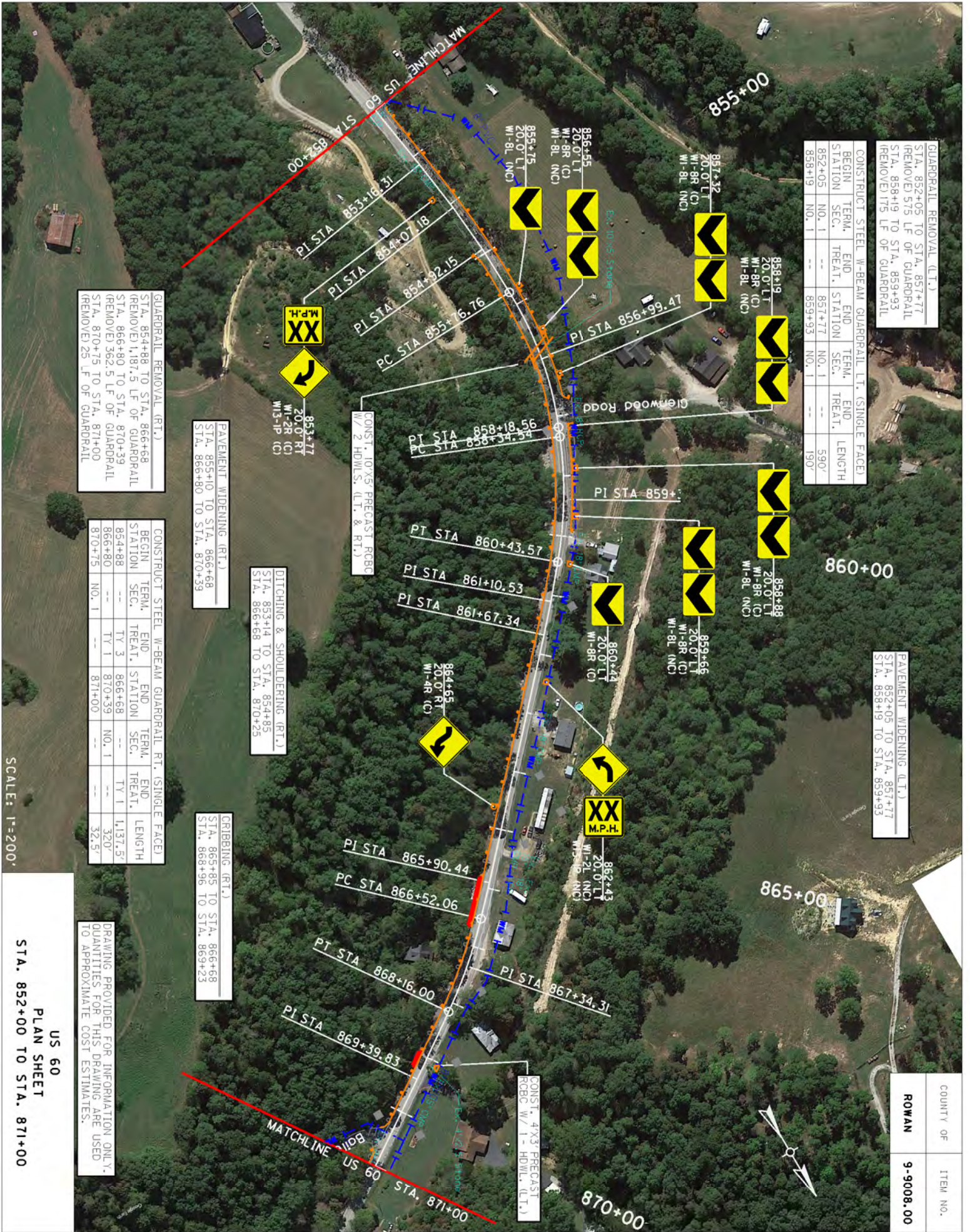
GUARDRAIL REMOVAL (RT.)		CONSTRUCT STEEL W-BEAM GUARDRAIL RT. (SINGLE FACE)	
BEGIN STATION	END STATION	BEGIN STATION	END STATION
833+00	836+39	833+00	852+00
REMOVE 339 LF OF GUARDRAIL STA. 841+72 TO STA. 841+95		REMOVE 25 LF OF GUARDRAIL STA. 833+00 TO STA. 836+39	
REMOVE 25 LF OF GUARDRAIL STA. 833+00 TO STA. 836+39		TY 1	
		NO. 1	262.5'

CONSTR. 36" EQUIV. GULVERT PIPE W/ 2 36" EQUIV. PIPE CULVERT HOLES (L.T. & RT.)

SCALE: 1"=200'

DRAWING PROVIDED FOR INFORMATION ONLY. QUANTITIES FOR THIS DRAWING ARE USED TO APPROXIMATE COST ESTIMATES.

US 60
PLAN SHEET
STA. 833+00 TO STA. 852+00



GUARDRAIL REMOVAL (LT.)

BEGIN STATION	TERM. SEC.	END STATION	TERM. TREAT.	LENGTH
852+05	NO. 1	857+77	---	590'
858+19	NO. 1	859+93	---	190'

CONSTRUCT STEEL W-BEAM GUARDRAIL LT. (SINGLE FACE)

BEGIN STATION	TERM. SEC.	END STATION	TERM. TREAT.	LENGTH
854+88	NO. 1	866+68	---	1,187.5'

PAVEMENT WIDENING (LT.)

BEGIN STATION	TERM. SEC.	END STATION	TERM. TREAT.	LENGTH
852+05	NO. 1	857+77	---	590'

PAVEMENT WIDENING (RT.)

BEGIN STATION	TERM. SEC.	END STATION	TERM. TREAT.	LENGTH
855+10	NO. 1	866+68	---	1,137.5'

COUNTY OF	ROWAN
ITEM NO.	9-9008.00

GUARDRAIL REMOVAL (RT.)

STA. 854+88 TO STA. 866+68
(REMOVED) 1,187.5 LF OF GUARDRAIL

STA. 866+80 TO STA. 870+39
(REMOVED) 362.5 LF OF GUARDRAIL

STA. 870+75 TO STA. 871+00
(REMOVED) 25 LF OF GUARDRAIL

PAVEMENT WIDENING (RT.)

STA. 855+10 TO STA. 866+68
STA. 866+80 TO STA. 870+39

DITCHING & SHOULDERING (RT.)

STA. 853+14 TO STA. 854+85
STA. 866+68 TO STA. 870+25

CRIBBING (RT.)

STA. 865+85 TO STA. 866+68
STA. 868+96 TO STA. 869+23

CONSTRUCT STEEL W-BEAM GUARDRAIL RT. (SINGLE FACE)

BEGIN STATION	TERM. SEC.	END STATION	TERM. TREAT.	LENGTH
854+88	---	866+68	TY 1	1,137.5'
866+80	---	870+39	---	320'
870+75	NO. 1	871+00	---	32.5'

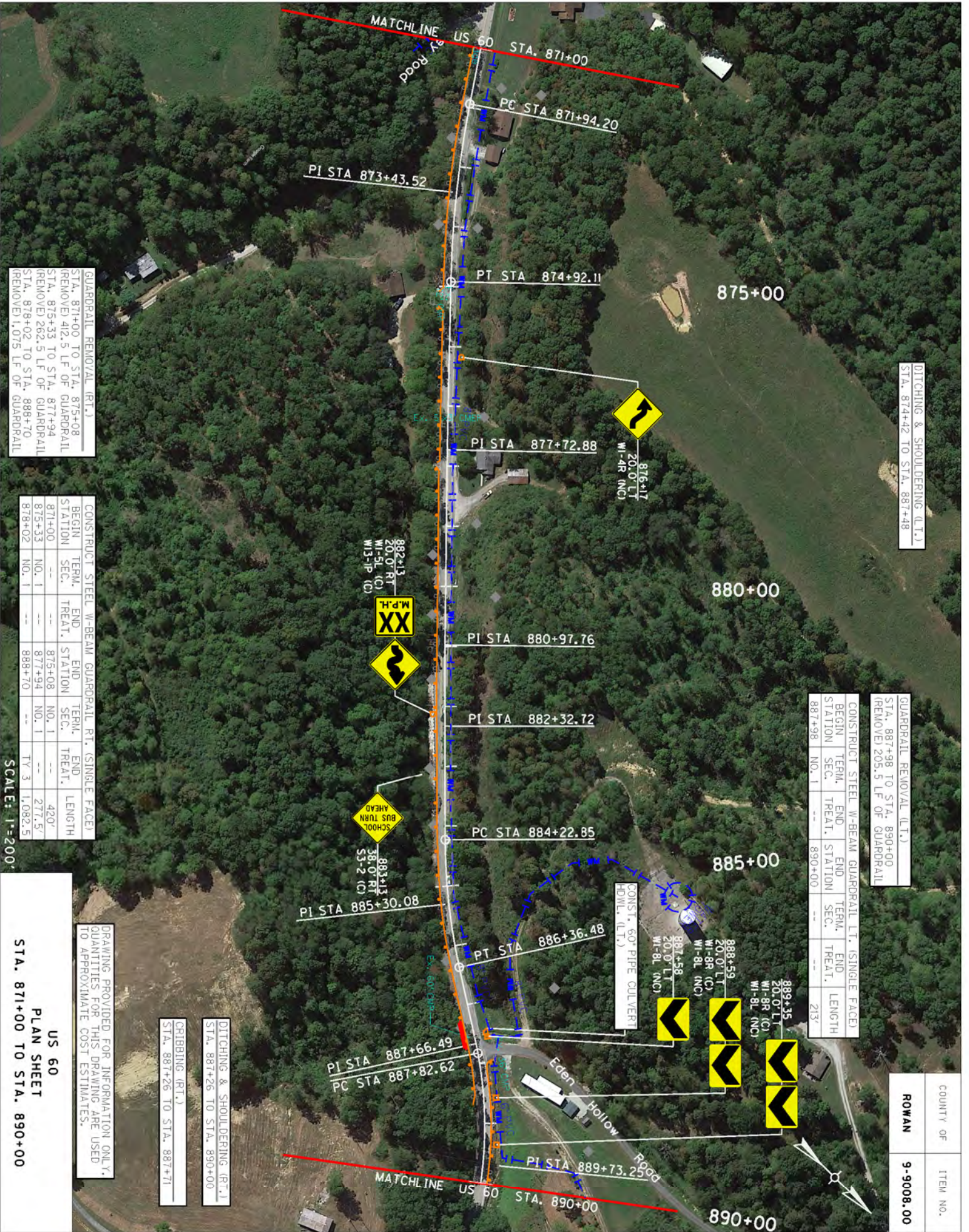
CONST. 10'X5' PRECAST RCBO W/ 2 HOWLS. (LT. & RT.)

CONST. 4'X3' PRECAST RCBO W/ 1- HOWL. (LT.)

SCALE: 1"=200'

US 60
PLAN SHEET
STA. 852+00 TO STA. 871+00

DRAWING PROVIDED FOR INFORMATION ONLY. QUANTITIES FOR THIS DRAWING ARE USED TO APPROXIMATE COST ESTIMATES.



DITCHING & SHOULDERING (R.T.)
STA. 874+42 TO STA. 887+48

GUARDRAIL REMOVAL (L.T.)
STA. 887+98 TO STA. 890+00
REMOVE 205.5 LF OF GUARDRAIL

COUNTY OF
ROWAN
ITEM NO.
9-9008.00

BEGIN STATION	TERM. SEC.	END STATION	TERM. SEC.	LENGTH
887+98	NO. 1	890+00	---	213'

GUARDRAIL REMOVAL (R.T.)
STA. 871+00 TO STA. 875+08
REMOVE 412.5 LF OF GUARDRAIL
STA. 875+33 TO STA. 877+94
REMOVE 262.5 LF OF GUARDRAIL
STA. 878+02 TO STA. 888+70
REMOVE 1,075 LF OF GUARDRAIL

BEGIN STATION	TERM. SEC.	END STATION	TERM. SEC.	LENGTH
871+00	---	875+08	---	420'
875+33	NO. 1	877+94	---	277.5'
878+02	NO. 1	888+70	---	1,082.5'

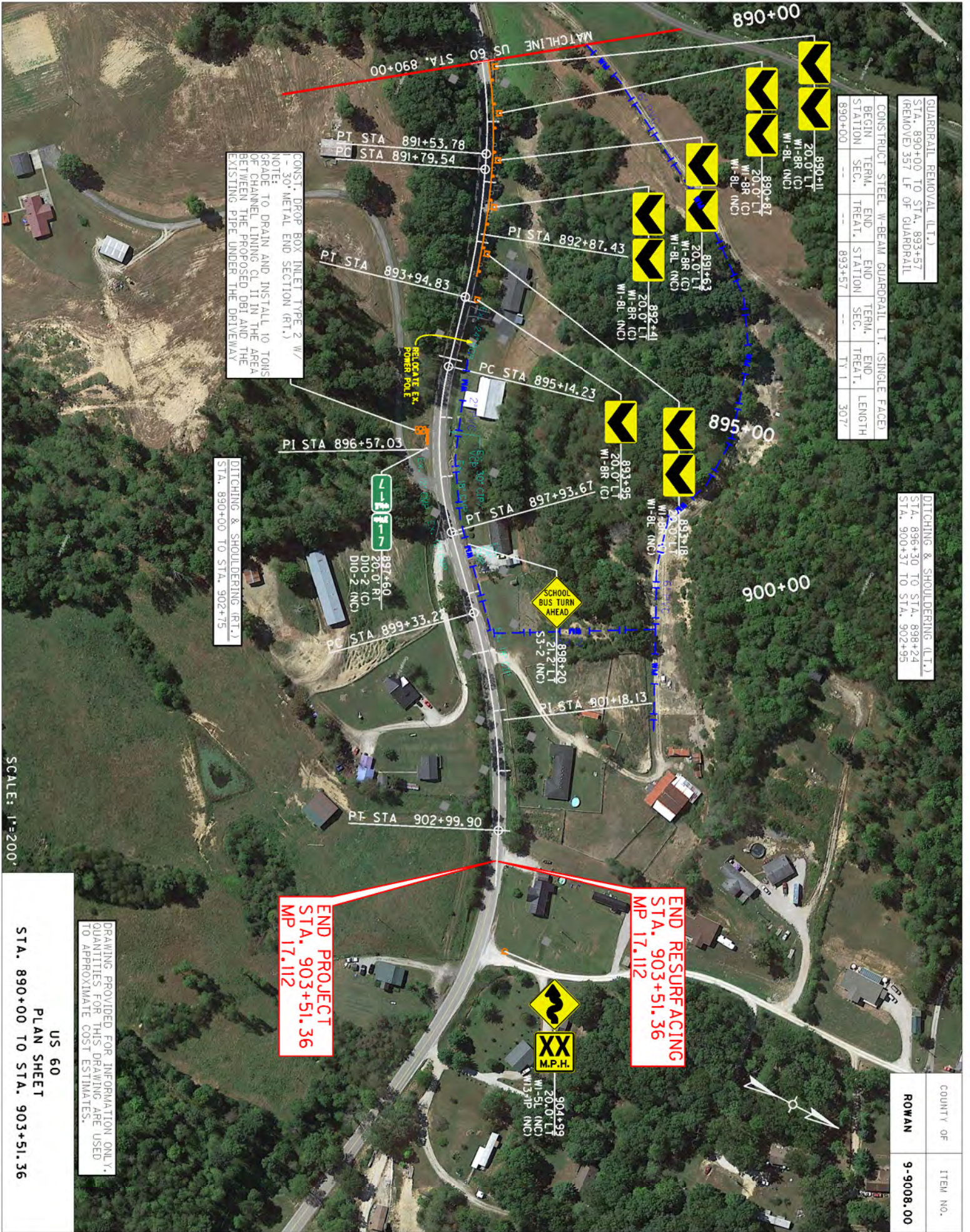
SCALE: 1"=200'

DRAWING PROVIDED FOR INFORMATION ONLY.
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US 60
PLAN SHEET
STA. 871+00 TO STA. 890+00

CRIBBING (R.T.)
STA. 887+26 TO STA. 887+71

DITCHING & SHOULDERING (R.T.)
STA. 887+26 TO STA. 890+00



BEGIN STATION	TERM. STATION	END TREAT.	END TREAT. SEC.	TY. 1	LENGTH
890+00	893+57	--	--	307	

GUARDRAIL REMOVAL (L.T.)
STA. 890+00 TO STA. 893+57
(REMOVED) 357 LF OF GUARDRAIL

DITCHING & SHOULDERING (L.T.)
STA. 896+30 TO STA. 898+24
STA. 900+37 TO STA. 902+95

COUNTY OF	ROWAN
ITEM NO.	9-9008.00

CONST. DROP BOX INLET TYPE 2 W/
- 30\"/>

DITCHING & SHOULDERING (R.T.)
STA. 890+00 TO STA. 902+75

END PROJECT
STA. 903+51.36
MP 17.112

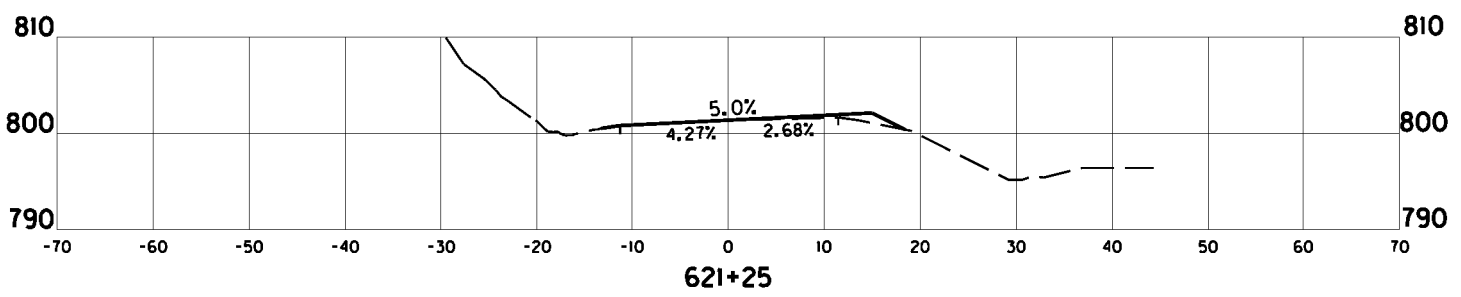
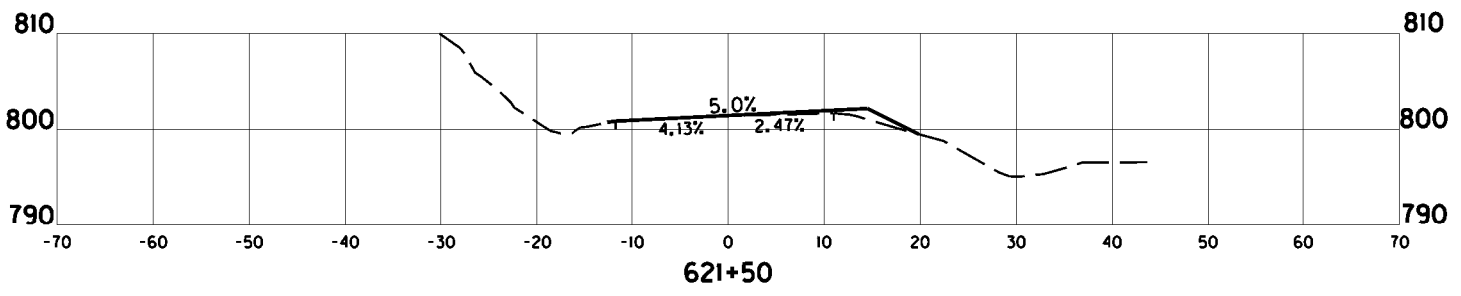
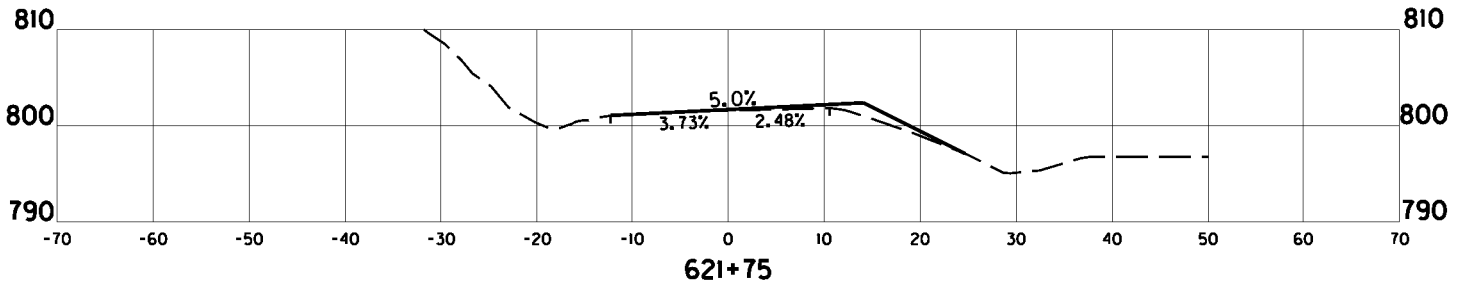
END RESURFACING
STA. 903+51.36
MP 17.112

SCALE: 1"=200'

US 60
PLAN SHEET
STA. 890+00 TO STA. 903+51.36

DRAWING PROVIDED FOR INFORMATION ONLY.
QUANTITIES FOR THIS DRAWING ARE USED
TO APPROXIMATE COST ESTIMATES.

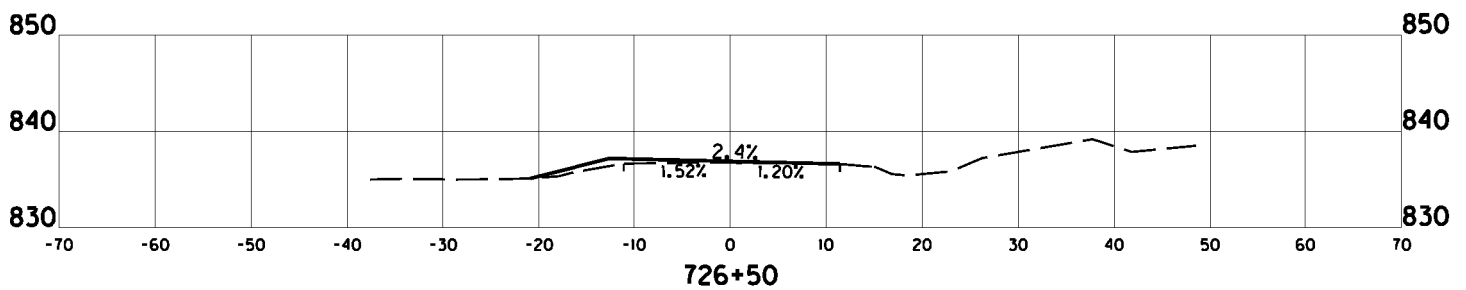
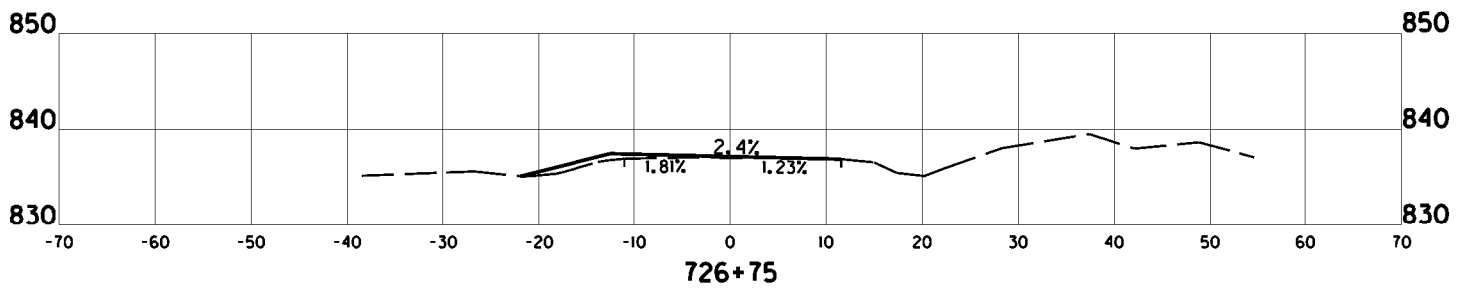
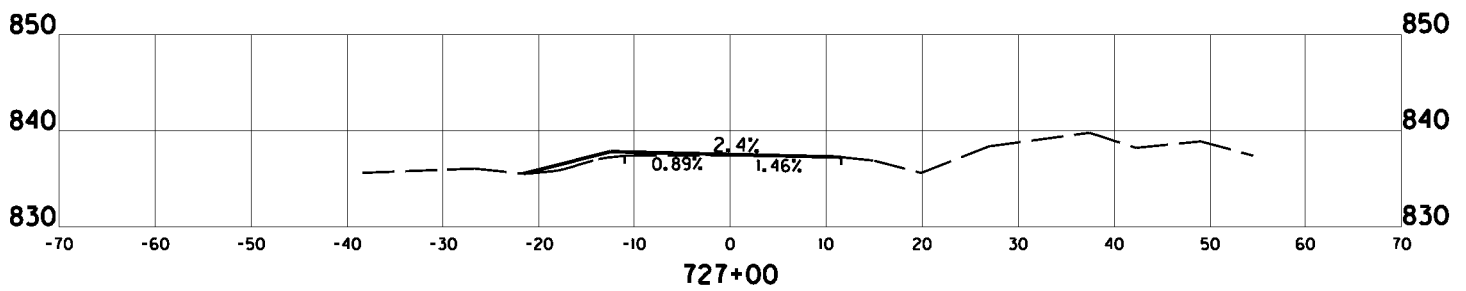
COUNTY OF	ITEM NO.
ROWAN	9-9008.00



SCALE: 1" = 20' HORIZONTAL
 1" = 20' VERTICAL

US 60
 STA. 621+25 TO STA. 621+75
 PI STA. 621+56.89 - SUPERELEVATION SECTIONS

COUNTY OF	ITEM NO.
ROWAN	9-9008.00

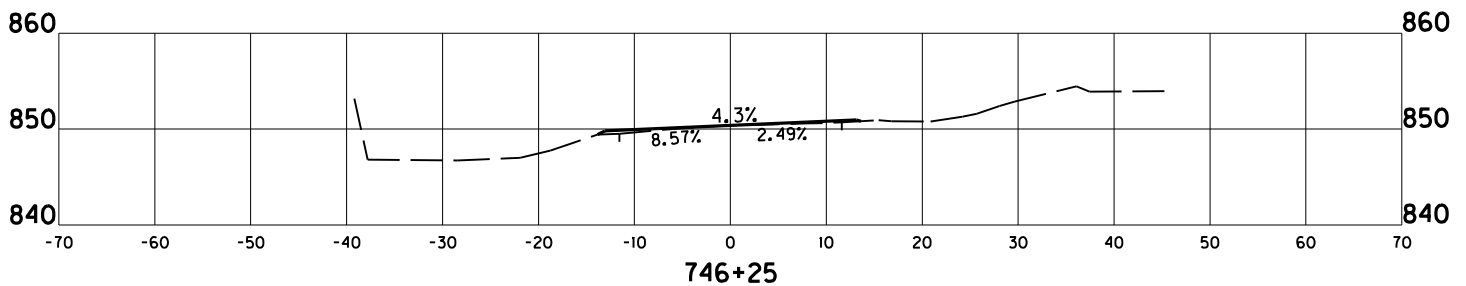
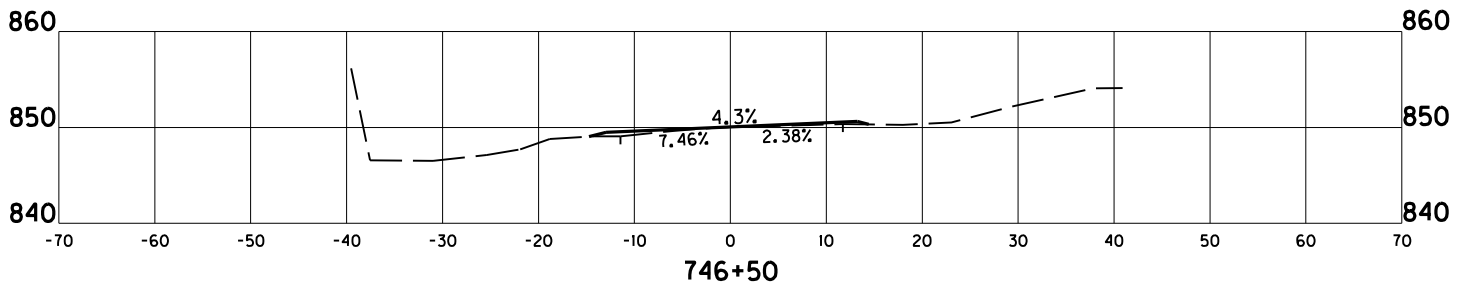
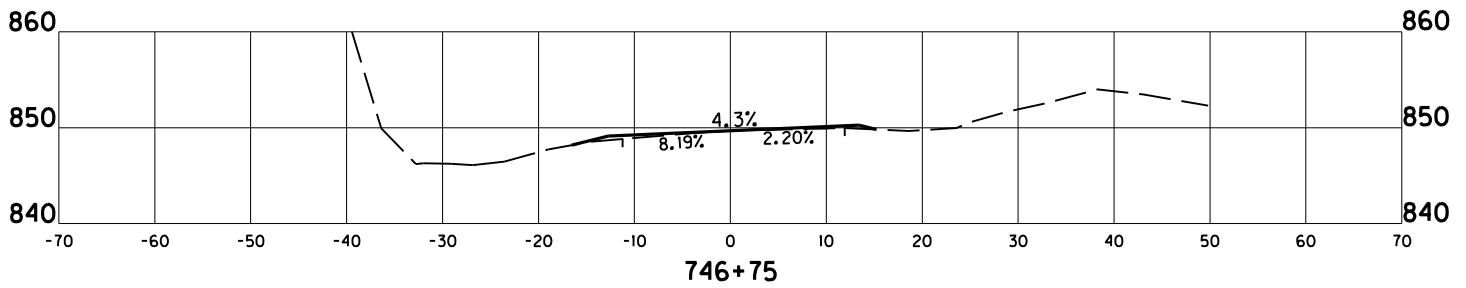


SCALE: 1" = 20' HORIZONTAL
 1" = 20' VERTICAL

US 60
 STA. 726+50 TO STA. 727+00
 PI STA. 726+80.63 - SUPERELEVATION SECTIONS

COUNTY OF	ITEM NO.
ROWAN	9-9008.00

STA. 750+00 END MILLING & TEXTURING
 STA. 748+25 BEGIN MILLING & TEXTURING



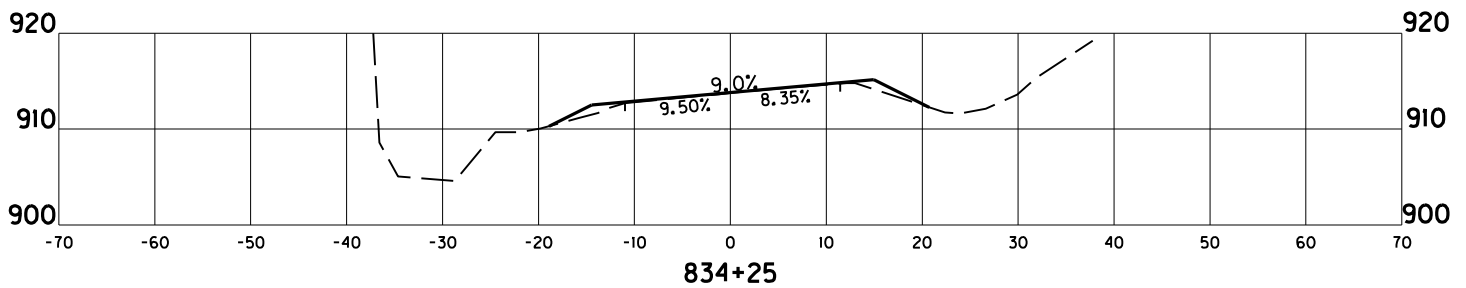
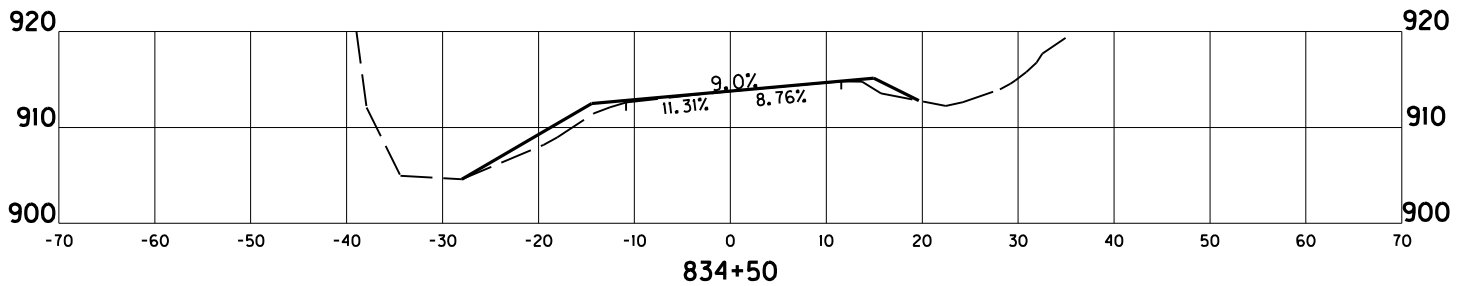
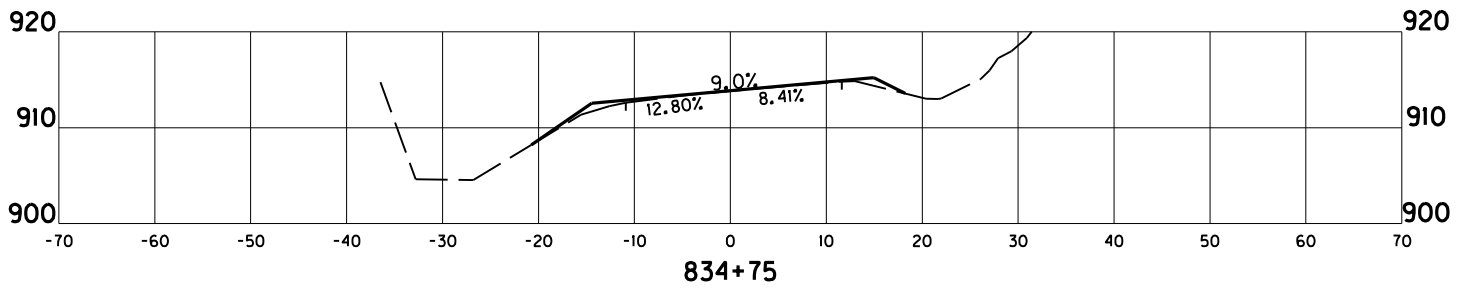
STA. 745+50 END MILLING & TEXTURING
 STA. 743+25 BEGIN MILLING & TEXTURING

SCALE: 1" = 20' HORIZONTAL
 1" = 20' VERTICAL

US 60
 STA. 746+25 TO STA. 746+75
 PI STA. 746+61.25 - SUPERELEVATION SECTIONS

COUNTY OF	ITEM NO.
ROWAN	9-9008.00

STA. 837+50 END MILLING & TEXTURING
STA. 835+25 BEGIN MILLING & TEXTURING

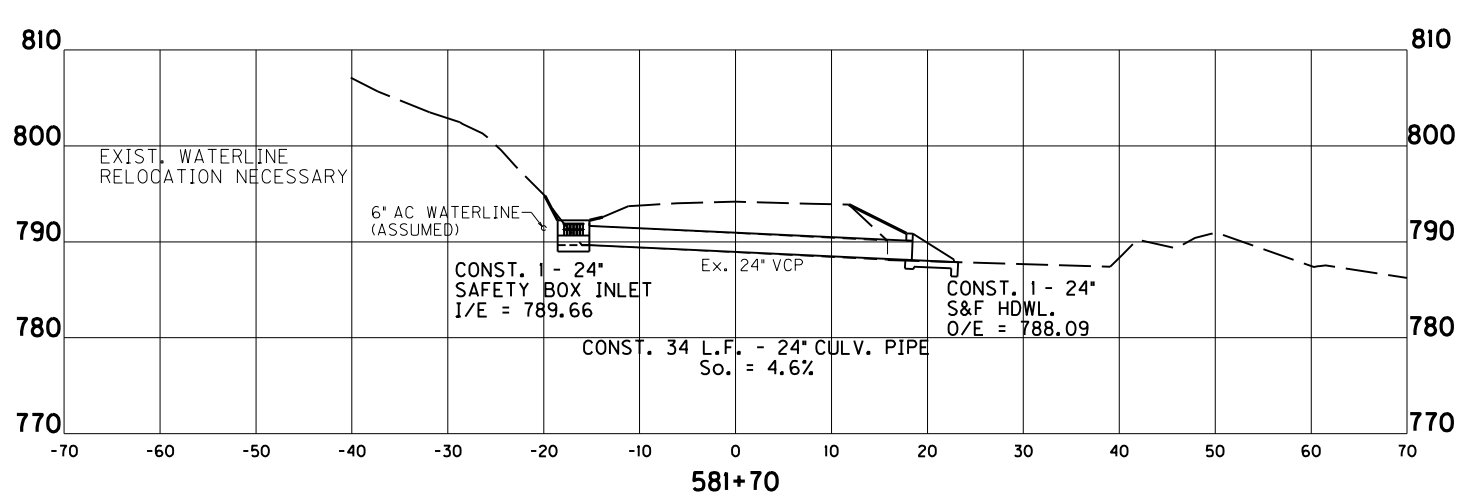
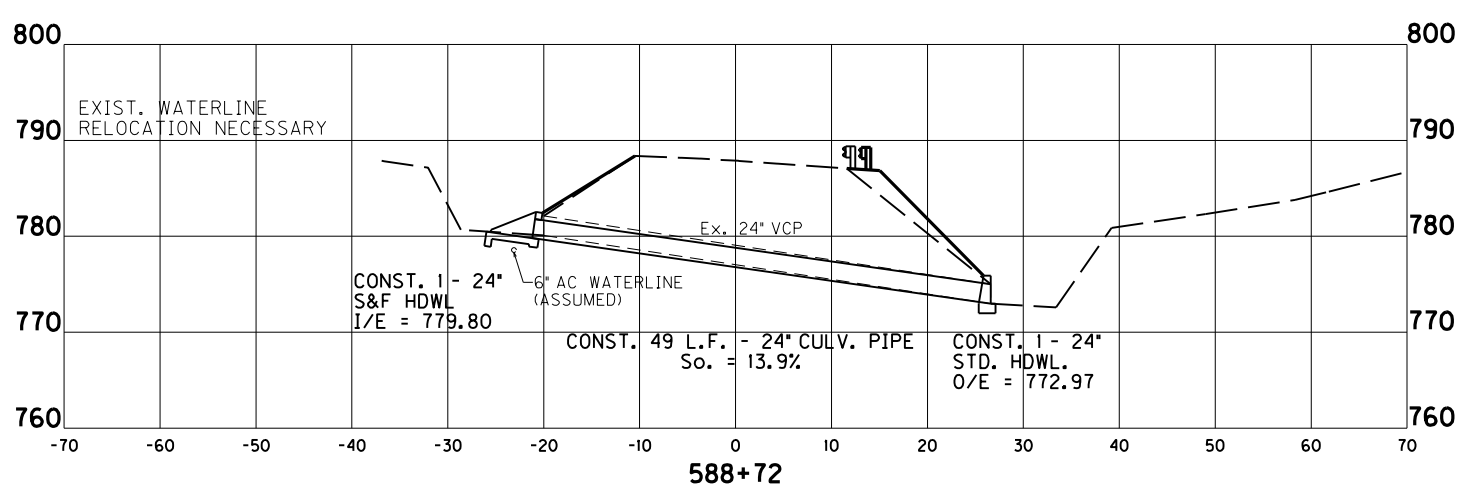
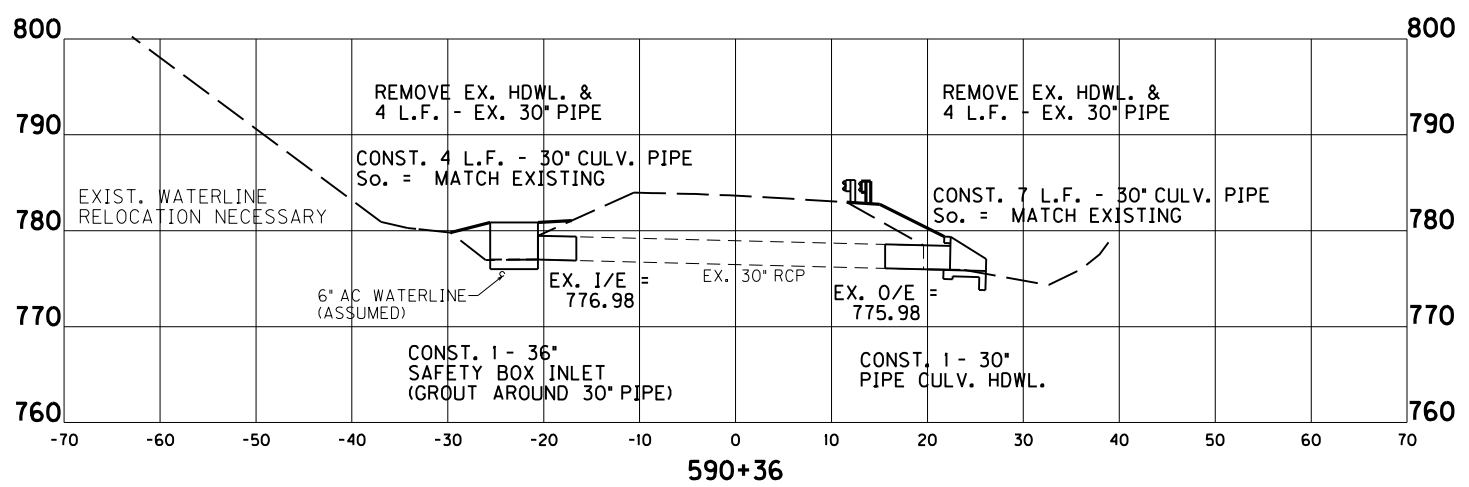


STA. 833+50 END MILLING & TEXTURING
STA. 831+50 BEGIN MILLING & TEXTURING

SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

US 60
STA. 834+25 TO STA. 834+75
PI STA. 834+46.54 - SUPERELEVATION SECTIONS

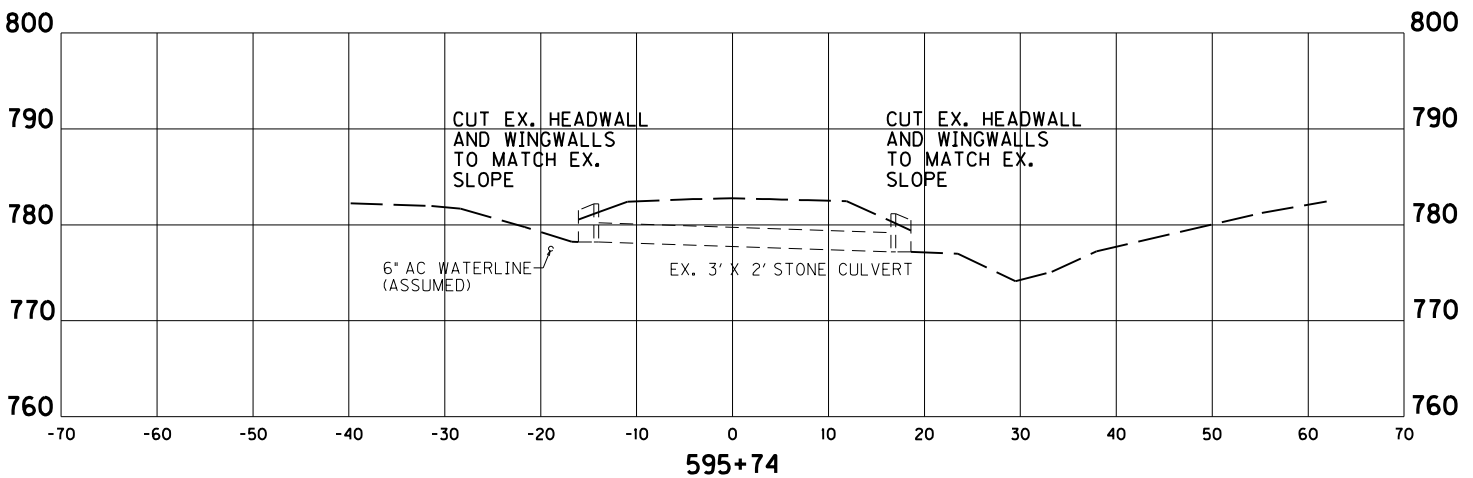
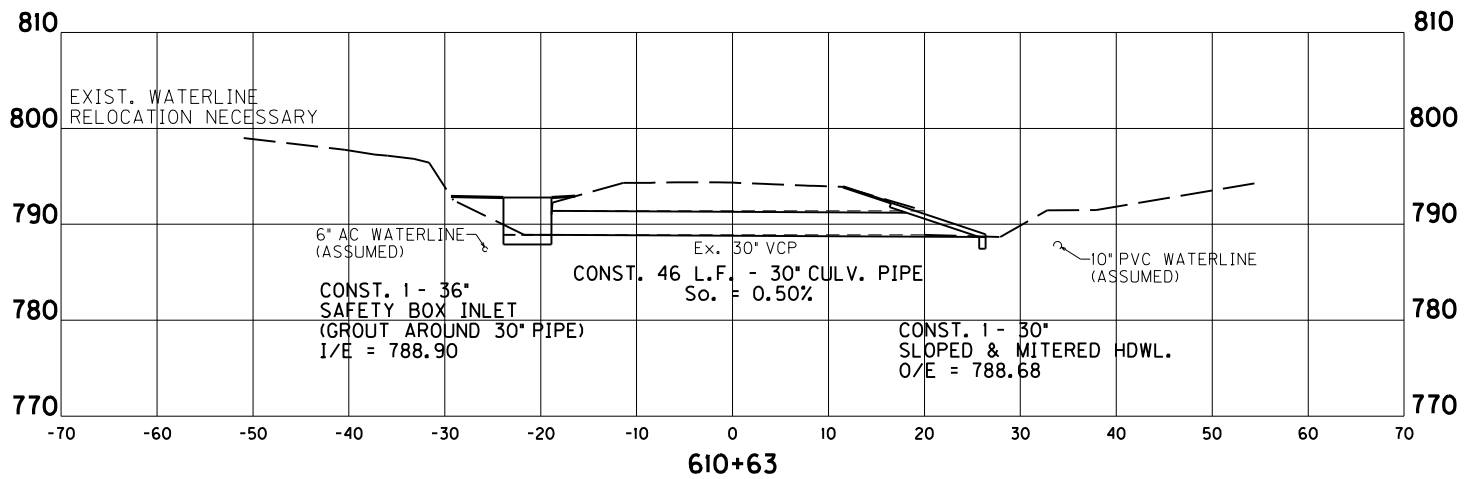
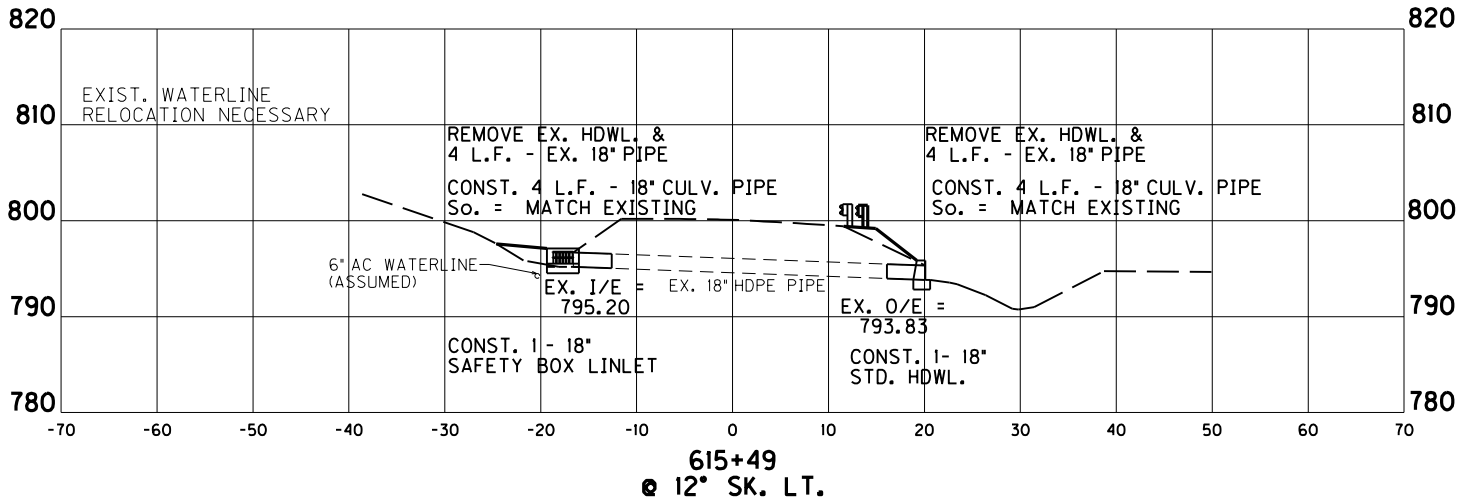
COUNTY OF	ITEM NO.
ROWAN	9-9008.00



US 60
STA. 581+70 TO STA. 590+36
PIPE SECTIONS

SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

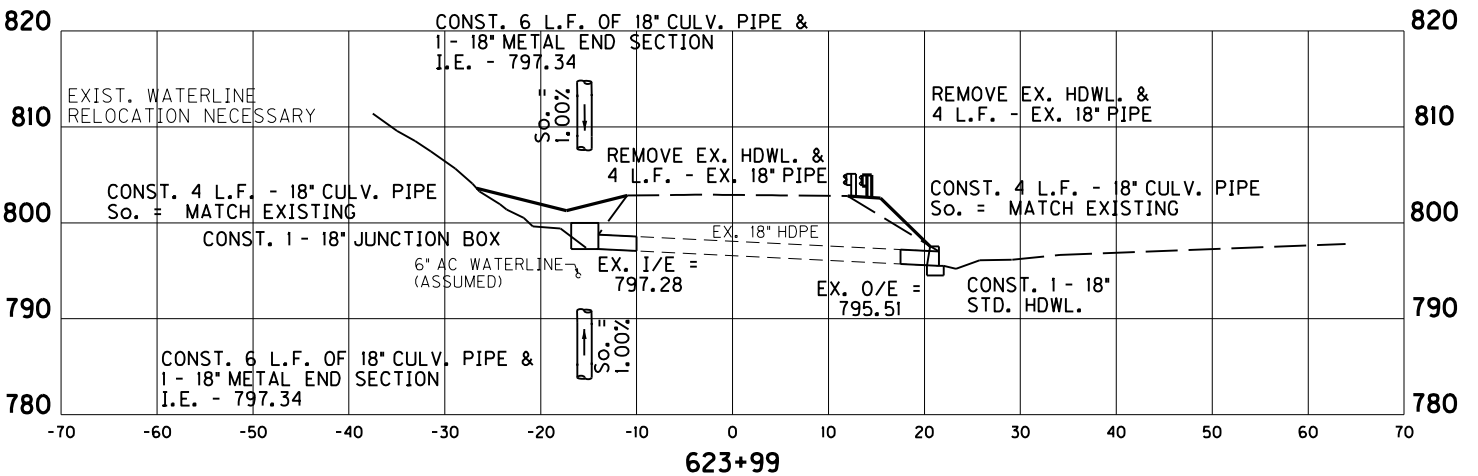
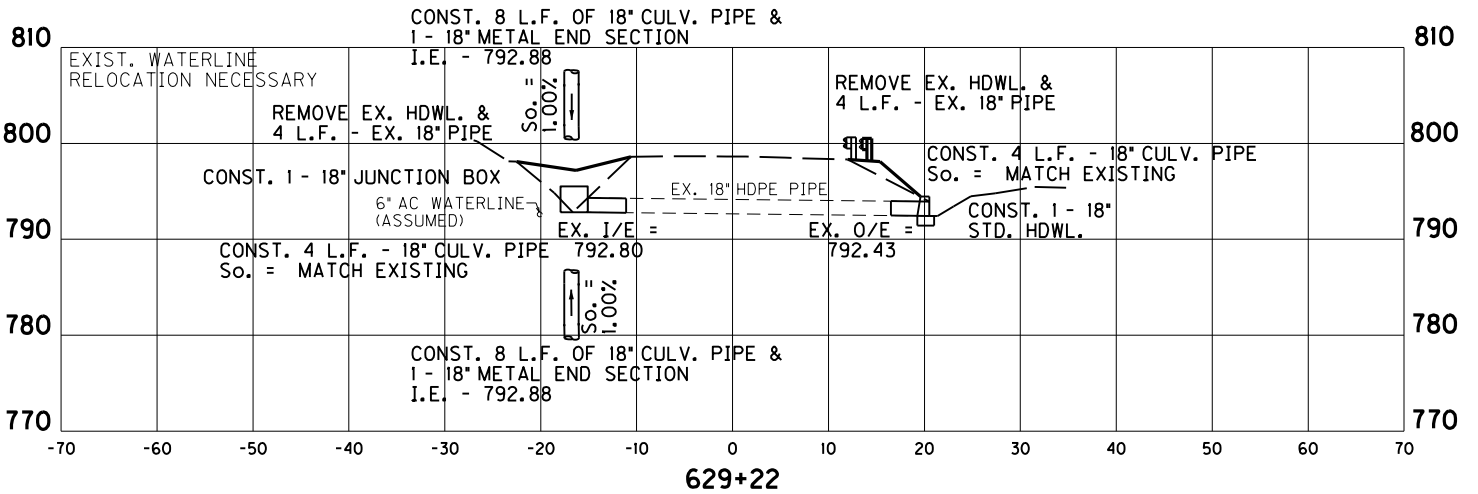
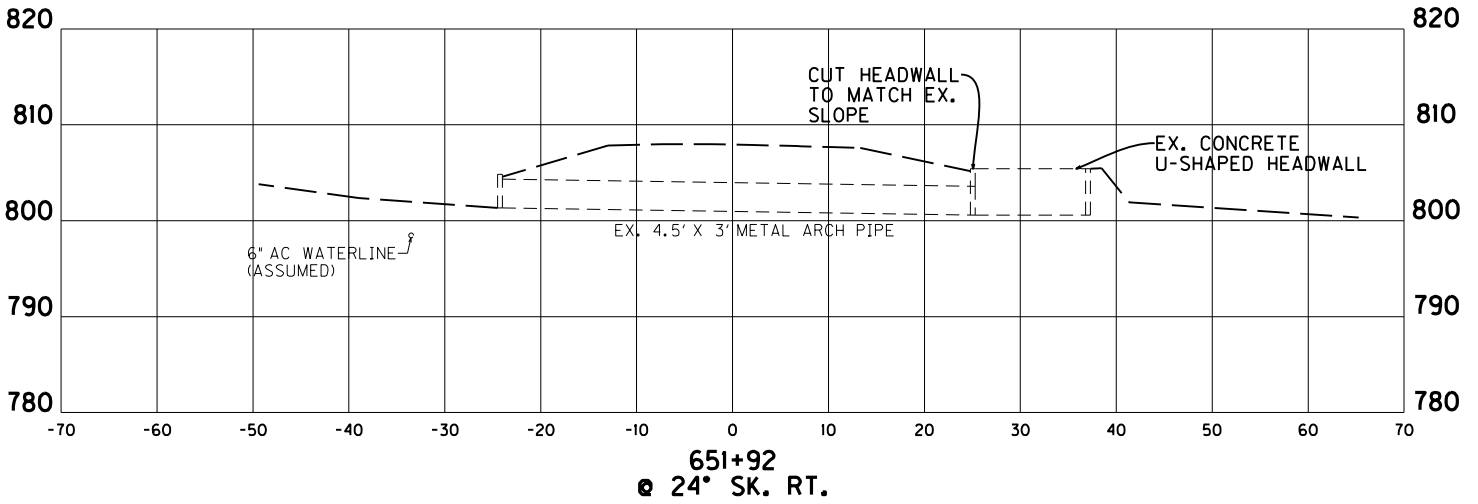
COUNTY OF	ITEM NO.
ROWAN	9-9008.00



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

US 60
STA. 595+74 TO STA. 615+49
PIPE SECTIONS

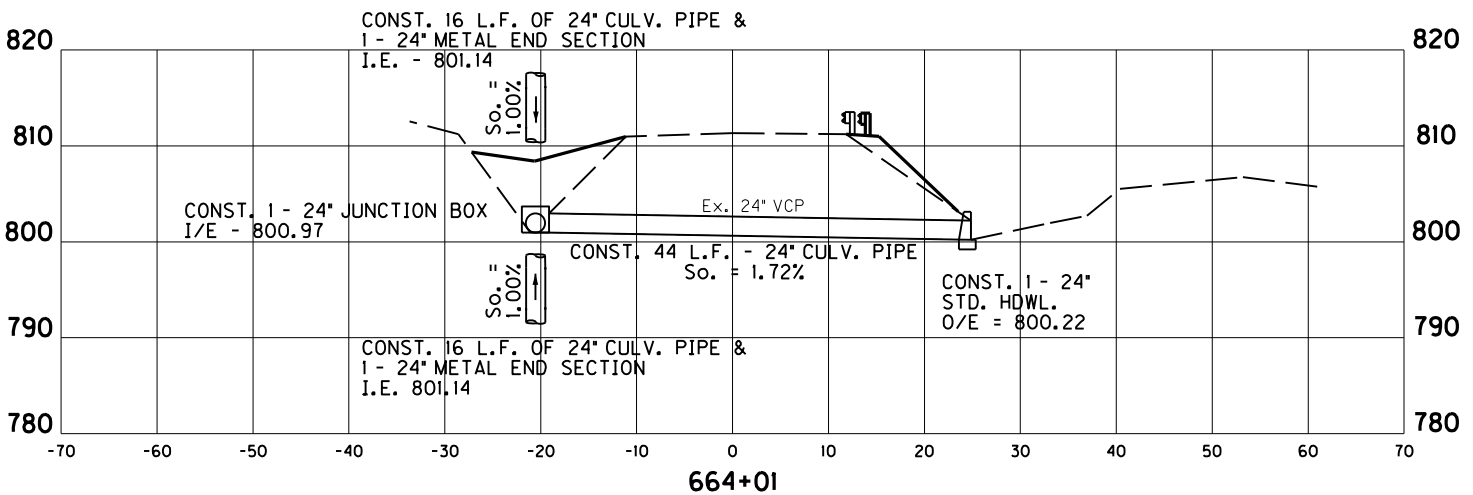
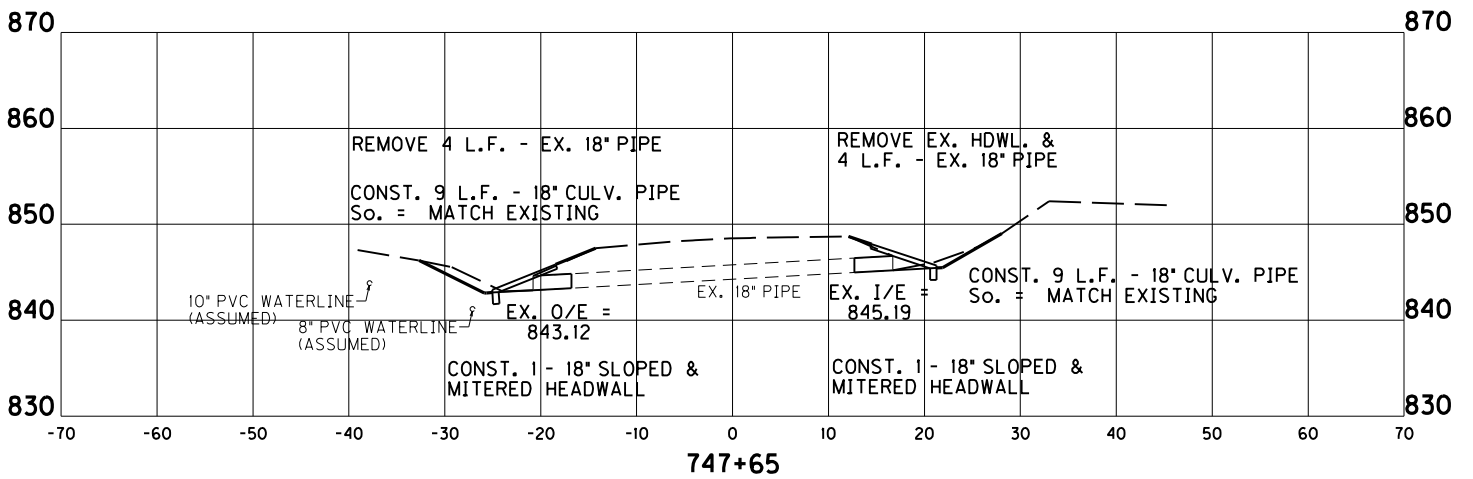
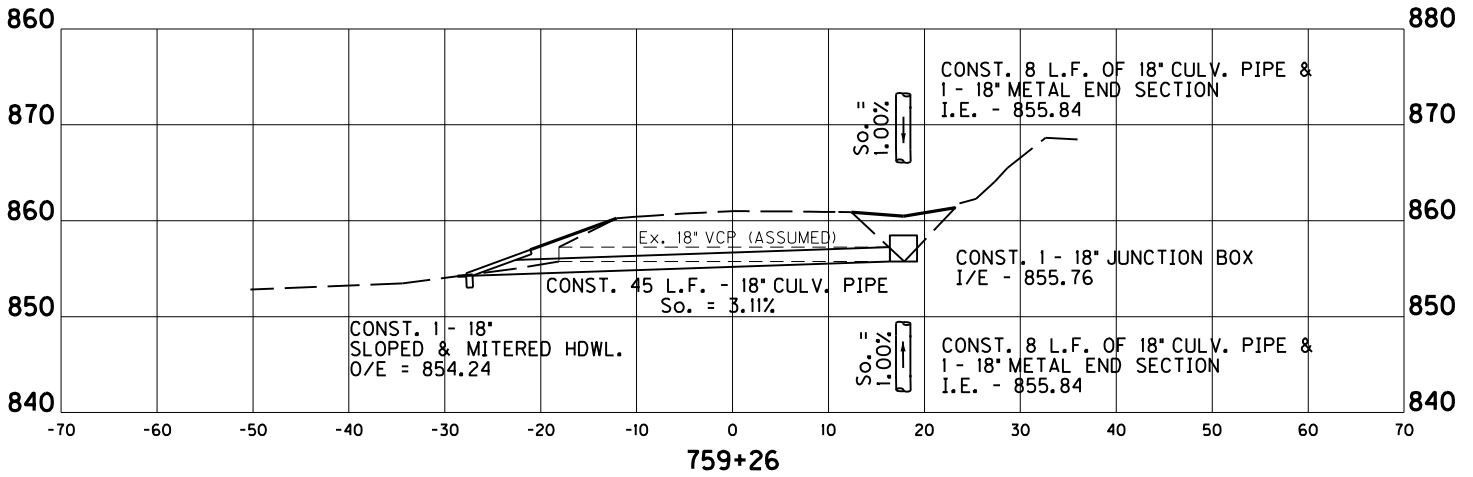
COUNTY OF	ITEM NO.
ROWAN	9-9008.00



SCALE: 1" = 20' HORIZONTAL
 1" = 20' VERTICAL

US 60
 STA. 623+99 TO STA. 651+92
 PIPE SECTIONS

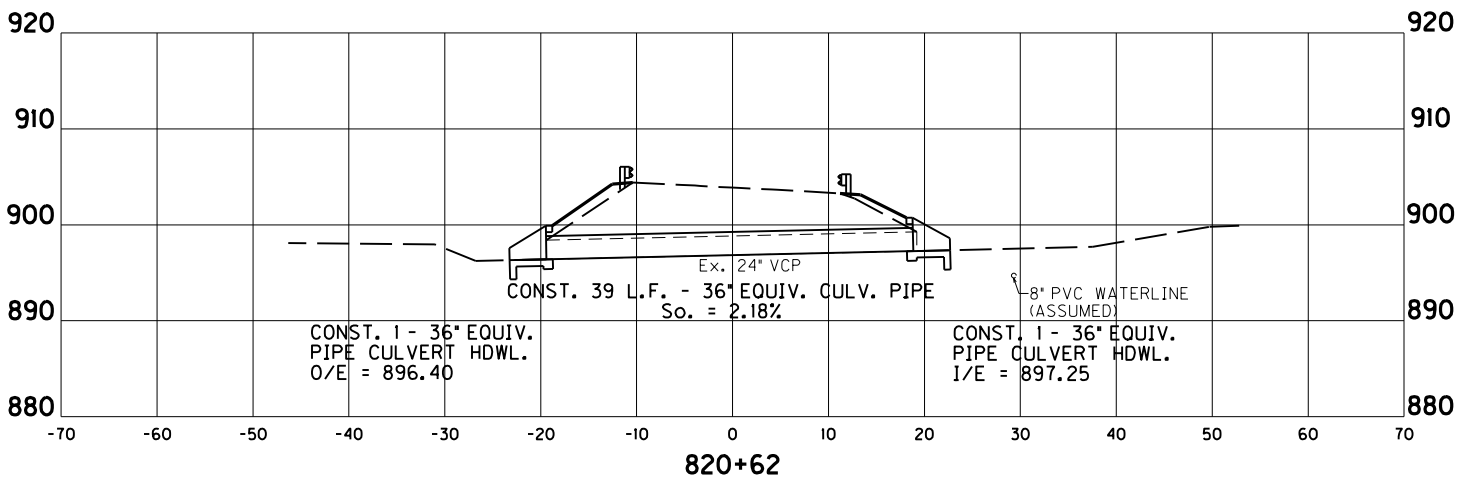
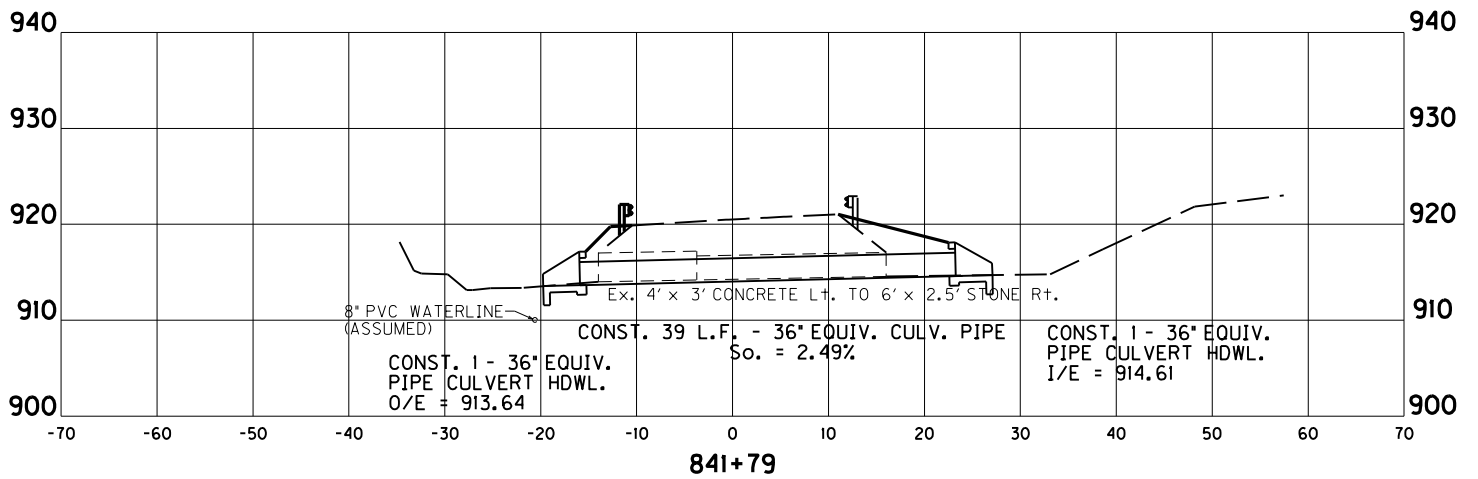
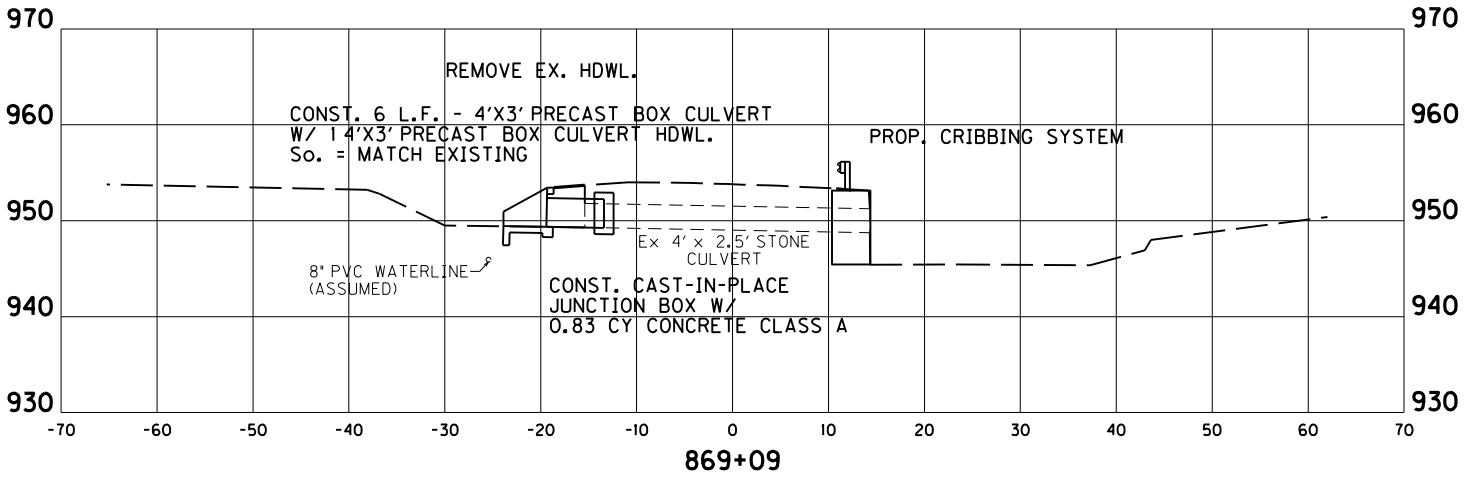
COUNTY OF	ITEM NO.
ROWAN	9-9008.00



US 60
 STA. 664+01 TO STA. 759+26
 PIPE SECTIONS

SCALE: 1" = 20' HORIZONTAL
 1" = 20' VERTICAL

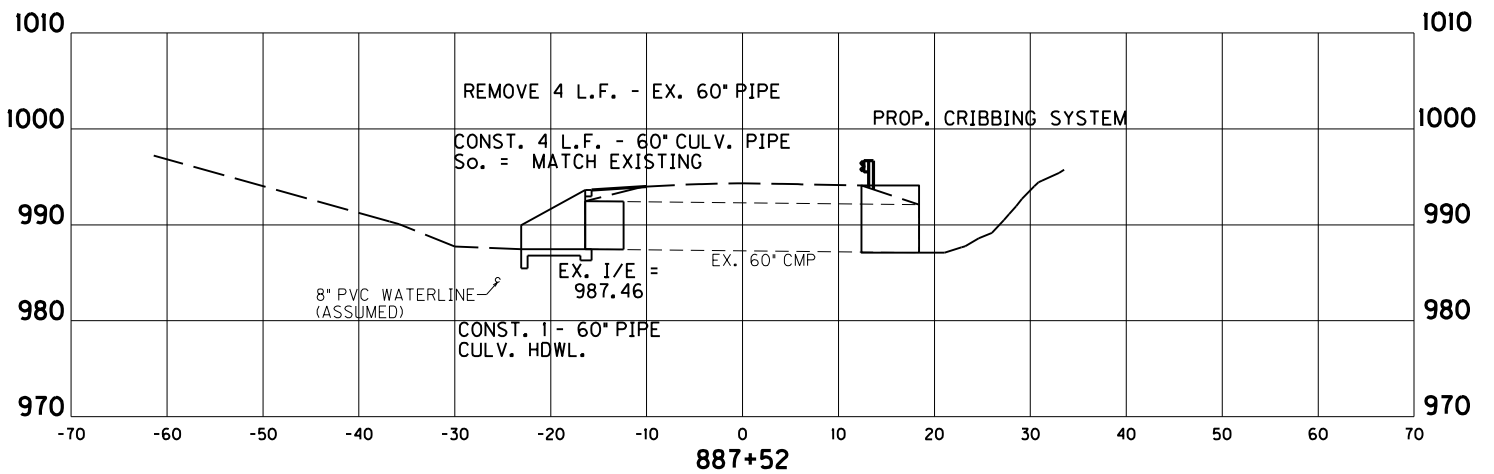
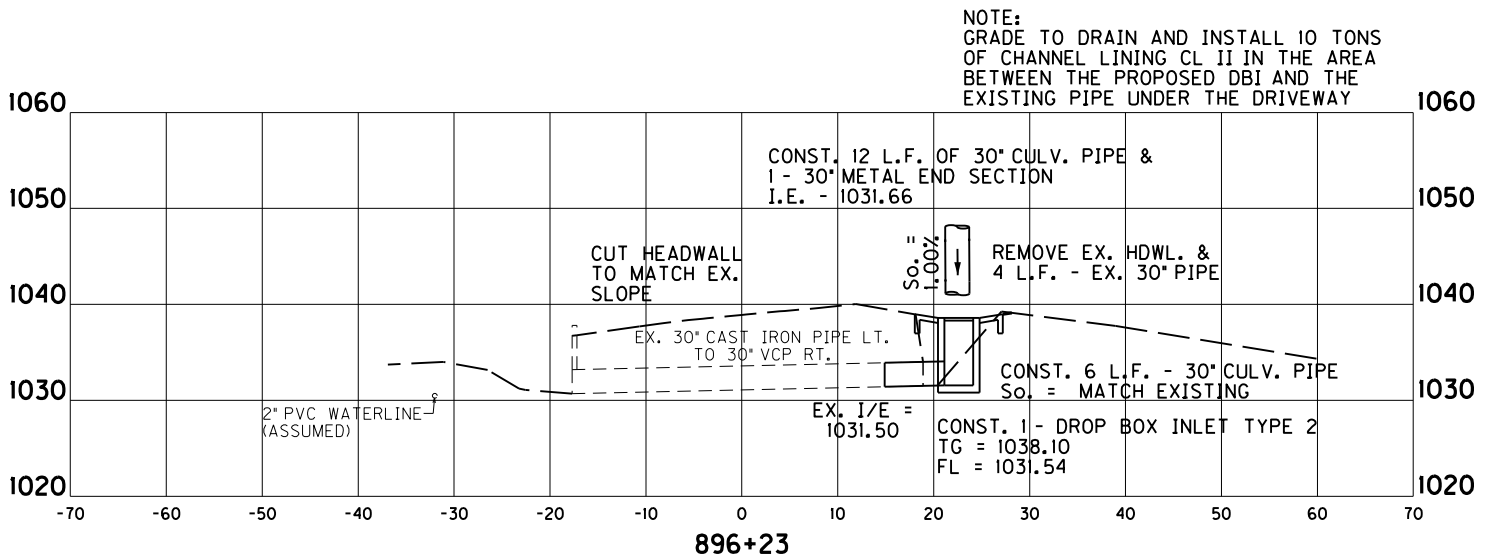
COUNTY OF	ITEM NO.
ROWAN	9-9008.00



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

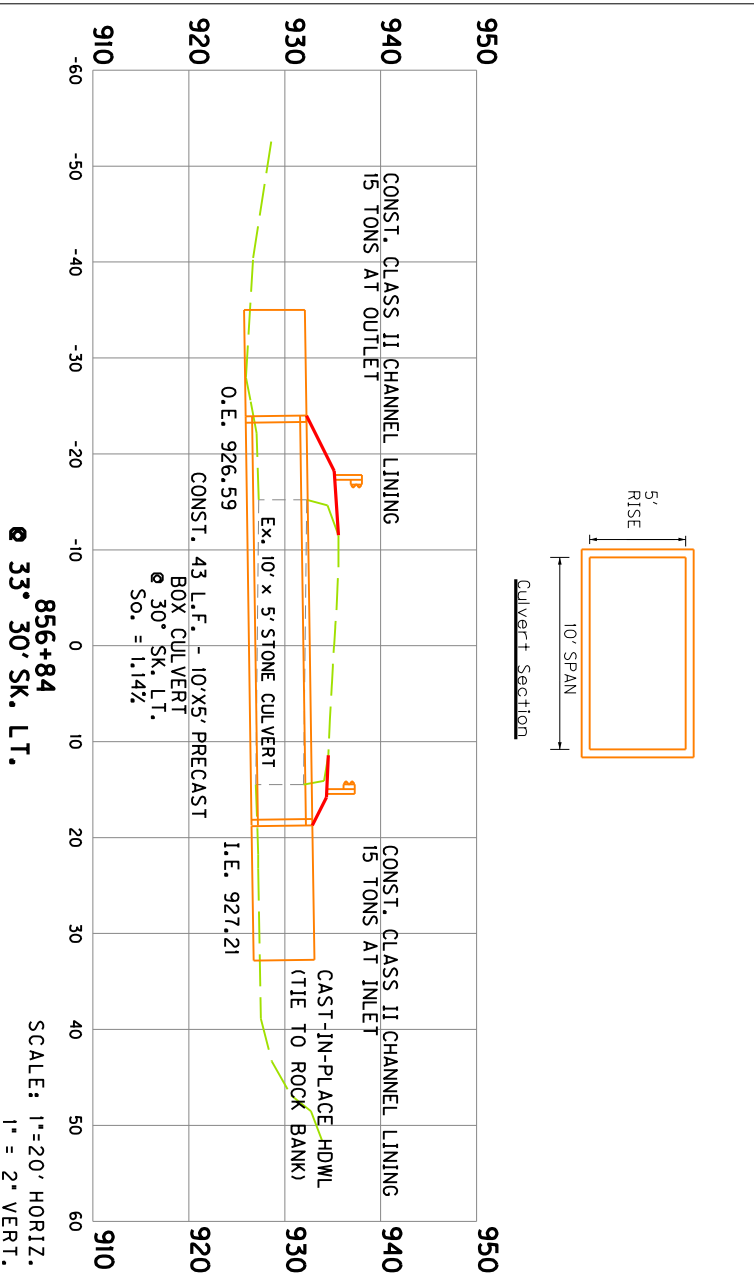
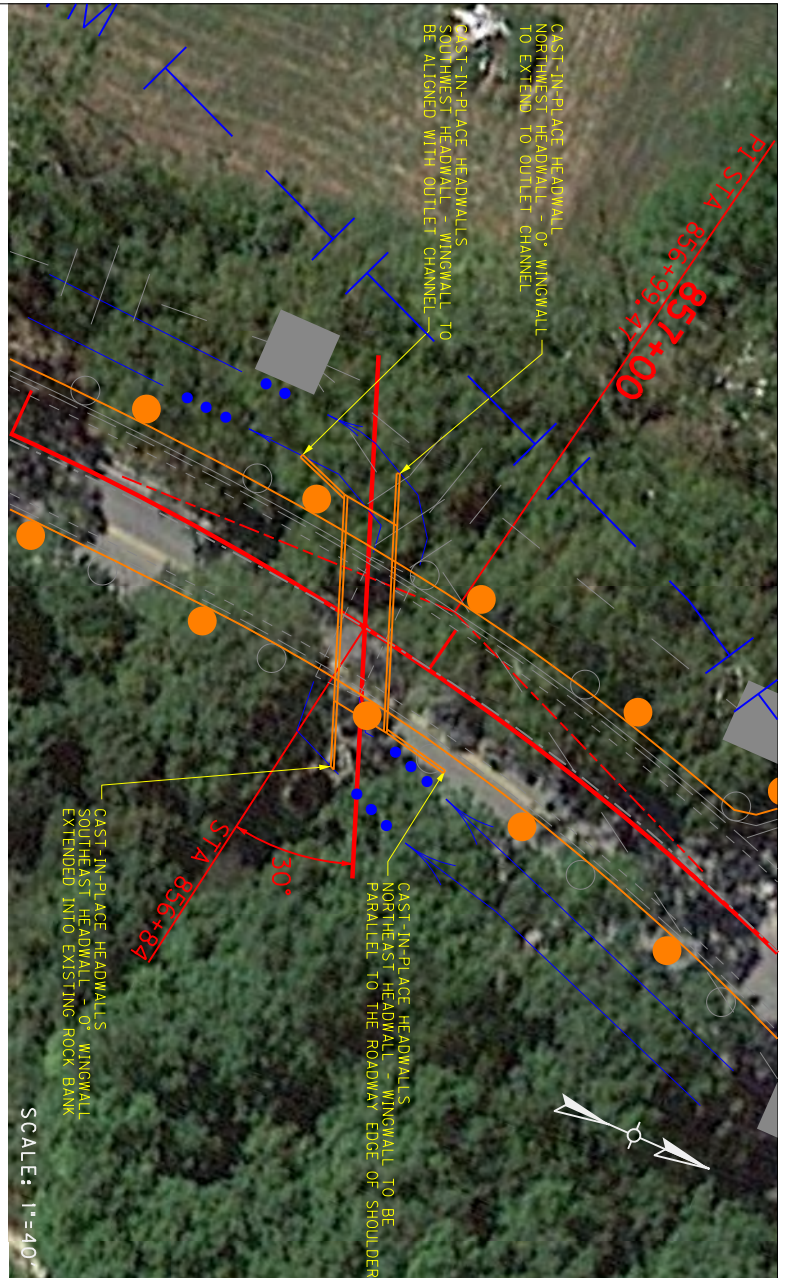
US 60
STA. 820+62 TO STA. 869+09
PIPE SECTIONS

COUNTY OF	ITEM NO.
ROWAN	9-9008.00



SCALE: 1" = 20' HORIZONTAL
 1" = 20' VERTICAL

US 60
 STA. 887+52 TO STA. 896+23
 PIPE SECTIONS



COUNTY OF	ITEM NO.
ROWAN	9-9008.00

- OTHER ACCEPTABLE ALTERNATES AS SHOWN IN THE APPROVED LIST FOR 4-SIDED CULVERTS: 10' SPAN x 5' RISE, LISTED FLOW AREA 50 SQUARE FEET
- GENERAL NOTES
1. DIMENSIONS AND ELEVATIONS SHOWN ARE APPROXIMATE AND INTENDED TO CONVEY ENOUGH INFORMATION TO DEVELOP DETAIL STRUCTURAL DRAWINGS, AND BIDDING DOCUMENTS. IF CONTRACTOR DESIRES TO MODIFY THIS LAYOUT, NO PAYMENT ADJUSTMENTS WILL BE ALLOWED.
 2. IF A LISTED ALTERNATE IS USED, GROUND ELEVATIONS MUST BE EQUAL TO OR GREATER THAN THE MINIMUM GROUND ELEVATION SHOWN HERE. IF MODIFICATIONS TO THE LAYOUT DUE TO SELECTION OF AN ALTERNATE STRUCTURE ARE REQUIRED, NO PAYMENT ADJUSTMENTS WILL BE ALLOWED.
 3. ALL WORK TO CONSTRUCT THE 4-SIDED CULVERT IS PAID FOR UNDER THE BID ITEMS "10'X5' PRECAST BOX CULVERT" AND "FOUNDATION PREPARATION". "10'X5' PRECAST BOX CULVERT" IS A LINEAR FOOT BID ITEM THAT COVERS ALL WORK TO CONSTRUCT THE CULVERT THAT IS NOT COVERED UNDER "FOUNDATION PREPARATION". THIS INCLUDES LABOR AND MATERIALS TO CONSTRUCT FOUNDATION PREPARATION, JOINT SEALING, AND STRUCTURE DRAINAGE APPURTENANCES. AS PER SECTION 603 OF THE KYTC STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE PAID FOR AS NEEDED. GUARDRAIL WILL ALSO BE MEASURED AND PAID FOR SEPARATELY.
 4. ALL COMPONENTS MUST BE DESIGNED TO MEET STRUCTURAL REQUIREMENTS AS SET FORTH FOR EARTH, DEAD, AND HL-93 LIVE LOAD IN AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, WITH INTERIMS. ALL DESIGNS SUBMITTED FOR CONSIDERATION MUST BE PERFORMED AND STAMPED BY A QUALIFIED PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF KENTUCKY.
 5. ALL FOUNDATION DESIGN MUST BE IN ACCORDANCE WITH THE APPROPRIATE PROVISIONS OF THE KENTUCKY TRANSPORTATION CABINET. THE MATERIALS SHALL CONSIST OF GRANULAR EMBANKMENT, NON-FRODIBLE ONLY, MEETING THE MATERIAL REQUIREMENTS OF SECTION 805 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, CONTRARY TO THE STANDARD SPECIFICATIONS. THE MAXIMUM SIZE LIMIT FOR GRANULAR EMBANKMENT IS 4 INCHES. THE EXCAVATION FOR THE GRANULAR REPLACEMENT SHALL EXTEND A MINIMUM WIDTH BEYOND THE EDGES OF THE FOOTINGS EQUAL TO THE REPLACEMENT DEPTH. THE GRANULAR REPLACEMENT SHALL BE PLACED ON A 1:1V SLOPE OR FLATTER FROM THE BASE OF THE FOOTING TO THE BOTTOM OF THE EXCAVATION. IN CASE OF A GEOTECHNICAL REPORT, A SEPARATOR BETWEEN GRANULAR EMBANKMENT AND THE EXISTING FOUNDATION SHALL BE IN ACCORDANCE WITH SECTION 214 & 843 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.
 6. ALL MATERIALS USED MUST BE IN CONFORMANCE WITH KYTC STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE KYTC LIST OF APPROVED MATERIALS, AND ALL APPLICABLE ASTM AND AASHTO STANDARDS.
 7. ALL PRECAST COMPONENTS SHALL BE MANUFACTURED BY A FABRICATOR APPROVED BY KYTC AND BE IN STRICT COMPLIANCE WITH SECTION 805 OF THE KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
 8. COMPLY WITH SECTION 106.04 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION BUY AMERICAN REQUIREMENT.
 9. IN ACCORDANCE WITH SECTION 106.04 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WEEP HOLES WILL BE REQUIRED FOR THESE STRUCTURES.
 10. 4-SIDED STRUCTURES THAT REQUIRE SPECIAL BACKFILL CONTRARY TO KYTC STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION WILL REQUIRE A CERTIFICATION LETTER STATING THAT THE BACKFILL WAS CONSTRUCTED PROPERLY, THE LETTER WILL BE SIGNED BY THE CONTRACTOR AND THE MANUFACTURER OF THE 4-SIDED STRUCTURE AND WILL BE SUBMITTED TO THE RESIDENT ENGINEER.
 11. THE MANUFACTURER OR SUPPLIER MUST PROVIDE 6 COPIES OF DETAILED SHOP DRAWINGS FOR FINAL APPROVAL FOR USE ON THIS PROJECT. BACKFILL REQUIREMENTS AND ANY SPECIFICATIONS THAT ARE CONTRARY TO THE KYTC STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SHOULD BE REVIEWED AND ARCHIVAL PURPOSES. THIS INFORMATION WILL BE SUBMITTED TO THE DIVISION OF CONSTRUCTION. ALLOW 4 WEEKS TIME FOR REVIEW OF THIS MATERIAL.

US 60
CULVERT DETAIL SHEET
STA. 856+84, 30° SK. LT.

DRAWING PROVIDED FOR INFORMATION ONLY.
QUANTITIES FOR THIS DRAWING ARE USED
TO APPROXIMATE COST ESTIMATES.

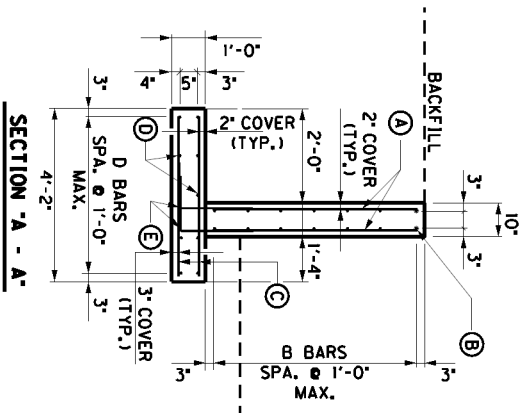
BILL OF REINFORCEMENT		
NORTHWEST WINGWALL		
MARK SIZE	NO.	LENGTH FT IN
A	4	24 5 6
B	5	14 10 6
C	4	24 3 8
D	5	10 10 6
E	4	24 4 0
F	4	14 4 0
G	4	- - -

BILL OF REINFORCEMENT		
NORTHEAST WINGWALL		
MARK SIZE	NO.	LENGTH FT IN
A	4	32 5 6
B	5	14 14 6
C	4	32 3 8
D	5	10 14 6
E	4	32 4 0
F	4	- - -
G	4	14 4 0

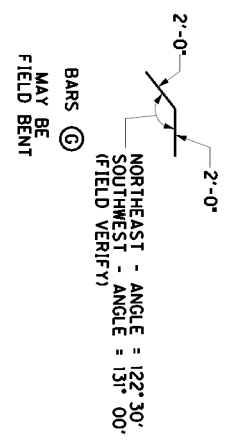
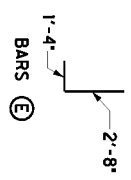
BILL OF REINFORCEMENT		
SOUTHWEST WINGWALL		
MARK SIZE	NO.	LENGTH FT IN
A	4	28 5 6
B	5	14 12 6
C	4	28 3 8
D	5	10 12 6
E	4	28 4 0
F	4	- - -
G	4	14 4 0

BILL OF REINFORCEMENT		
SOUTHEAST WINGWALL		
MARK SIZE	NO.	LENGTH FT IN
A	4	30 5 6
B	5	14 13 6
C	4	30 3 8
D	5	10 13 6
E	4	30 4 0
F	4	- - -
G	4	14 4 0

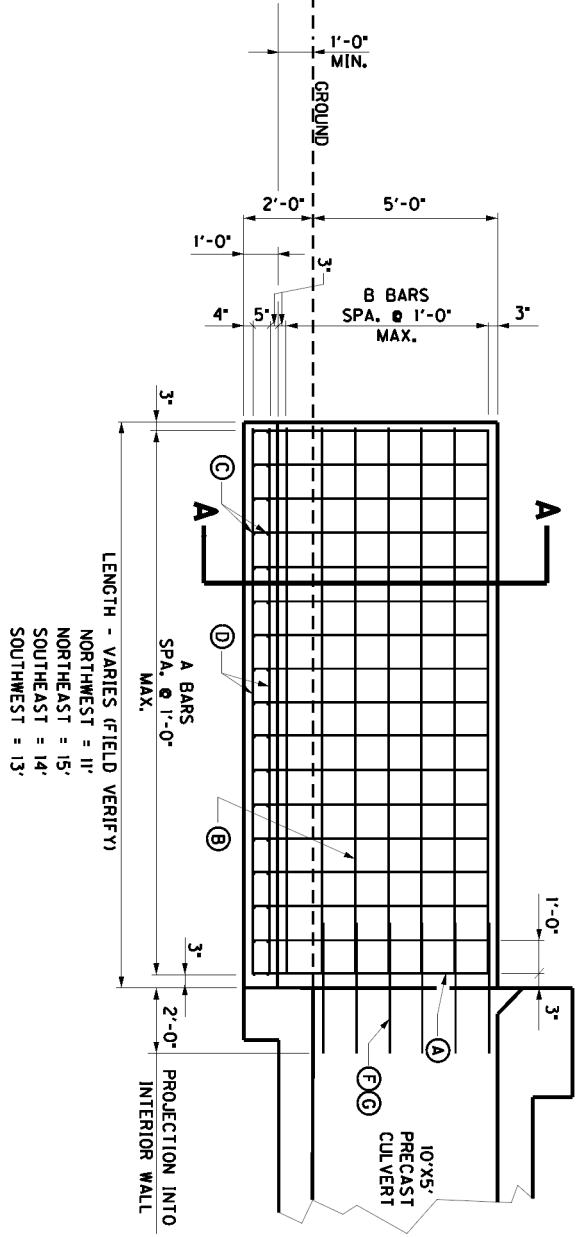
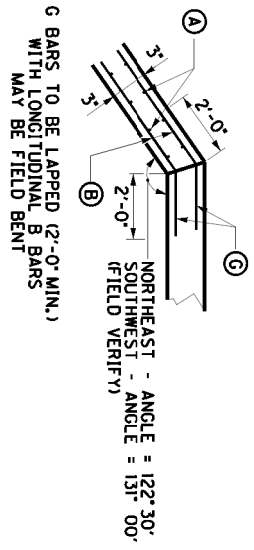
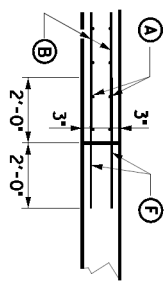
WINGWALLS - LENGTH VARIES (FIELD VERIFY)
NORTHWEST = 11'
NORTHEAST = 15'
SOUTHEAST = 14'
SOUTHWEST = 13'



BENT BAR SHAPES



WINGWALL CONNECTION DETAILS



US 60 TYPICAL
10' X 5' CULVERT WINGWALL
STEEL REINFORCEMENT

COUNTY OF	ITEM NO.
ROWAN	9-9008.00

COUNTY OF	ITEM NO.
ROWAN	9-9008.00

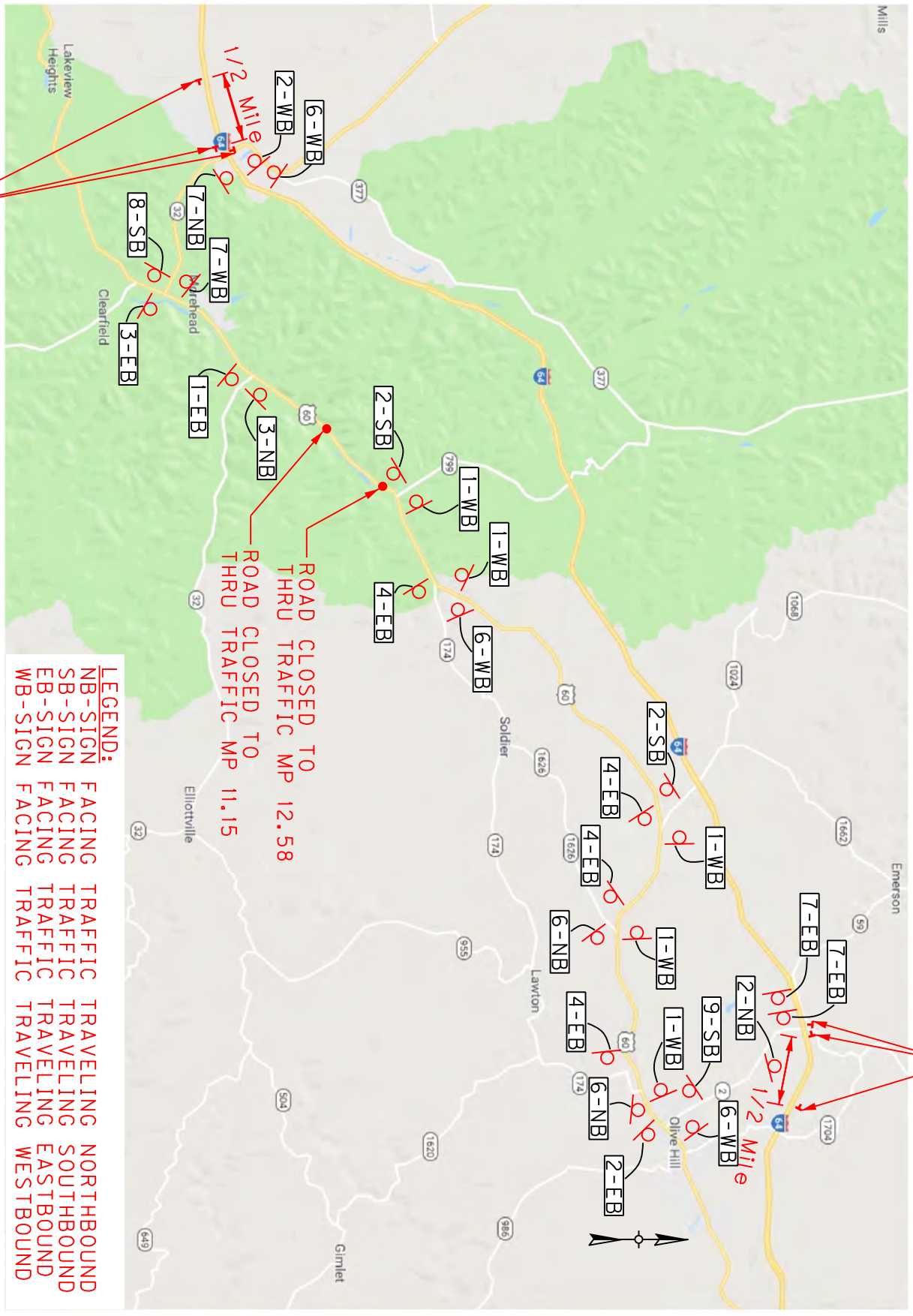
<p>ROAD CLOSED TO THRU TRAFFIC</p> <p>1 R11-4 60" X 30"</p>	<p>DETOUR WEST 60</p> <p>4 R4-8 24" X 12" M3-4 24" X 12" M1-4 24" X 24" M6-3 21" X 15"</p>	<p>DETOUR EAST 60</p> <p>7 R4-8 24" X 12" M3-2 24" X 12" M1-4 24" X 24" M5-1 21" X 15"</p>
<p>DETOUR WEST 60</p> <p>2 R4-8 24" X 12" M3-4 24" X 12" M1-4 24" X 24" M5-1 21" X 15"</p>	<p>DETOUR EAST 60</p> <p>5 R4-8 24" X 12" M3-2 24" X 12" M1-4 24" X 24" M6-3 21" X 15"</p>	<p>END DETOUR WEST 60</p> <p>8 R4-8A 24" X 18" M3-4 24" X 12" M1-4 24" X 24"</p>
<p>DETOUR EAST 60</p> <p>3 R4-8 24" X 12" M3-2 24" X 12" M1-4 24" X 24" M5-1 21" X 15"</p>	<p>DETOUR WEST 60</p> <p>6 R4-8 24" X 12" M3-4 24" X 12" M1-4 24" X 24" M5-1 21" X 15"</p>	<p>END DETOUR EAST 60</p> <p>9 R4-8A 24" X 18" M3-2 24" X 12" M1-4 24" X 24"</p>

DETOUR SHEET
SIGN SUMMARY

DATE TO BE UPDATED
 11.15 - 24" PIPE REPLACEMENT
 12.58 - 24" PIPE REPLACEMENT
 16.22 - 10'X5' RCBC REPLACEMENT

CHANGEABLE MESSAGE SIGNS
 US 60 @ MP 12.58 CLOSED
 TO THRU TRAFFIC FROM
 DATE - DATE

COUNTY OF	ITEM NO.
ROWAN	9-9008.00



ROAD CLOSED TO THRU TRAFFIC MP 12.58
 ROAD CLOSED TO THRU TRAFFIC MP 11.15

US 60 @ MP 11.15 CLOSED
 TO THRU TRAFFIC FROM
 DATE - DATE

CHANGEABLE MESSAGE SIGNS

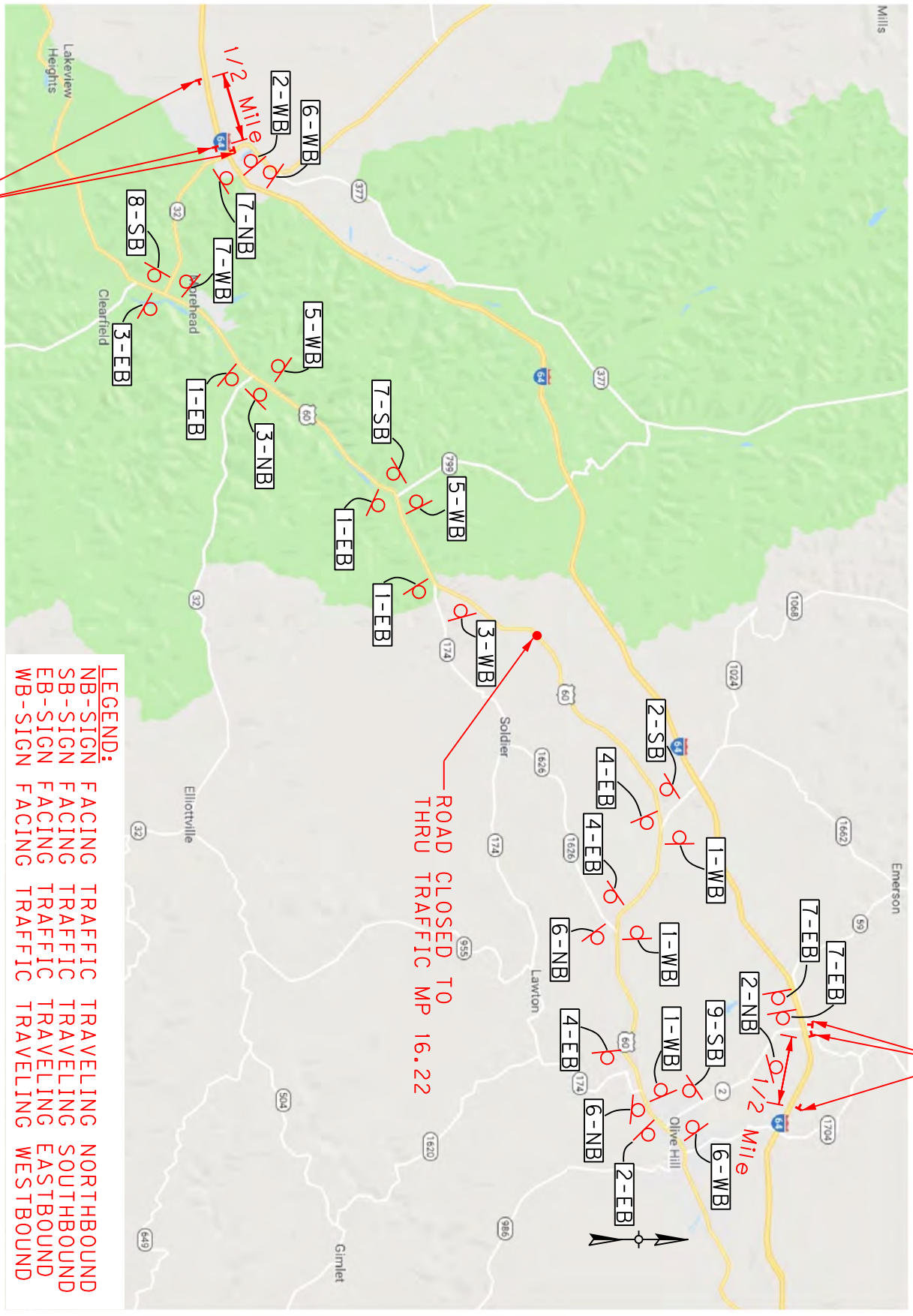
LEGEND:

NB-SIGN	FACING	TRAFFIC	TRAVELLING	NORTHBOUND
SB-SIGN	FACING	TRAFFIC	TRAVELLING	SOUTHBOUND
EB-SIGN	FACING	TRAFFIC	TRAVELLING	EASTBOUND
WB-SIGN	FACING	TRAFFIC	TRAVELLING	WESTBOUND

DATE TO BE UPDATED
 11.15 - 24" PIPE REPLACEMENT
 12.58 - 24" PIPE REPLACEMENT
 16.22 - 10'X5' RCBC REPLACEMENT

CHANGEABLE MESSAGE SIGNS
 US 60 @ MP 16.22 CLOSED
 TO THRU TRAFFIC FROM
 DATE - DATE

COUNTY OF	ITEM NO.
ROWAN	9-9008.00



LEGEND:
 NB-SIGN FACING TRAFFIC TRAVELLING NORTHBOUND
 SB-SIGN FACING TRAFFIC TRAVELLING SOUTHBOUND
 EB-SIGN FACING TRAFFIC TRAVELLING EASTBOUND
 WB-SIGN FACING TRAFFIC TRAVELLING WESTBOUND

US 60 @ MP 16.22 CLOSED
 TO THRU TRAFFIC FROM
 DATE - DATE
 CHANGEABLE MESSAGE SIGNS

DETOUR SHEET 2

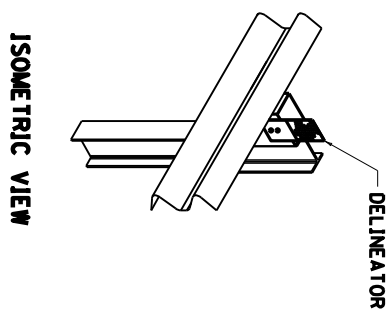
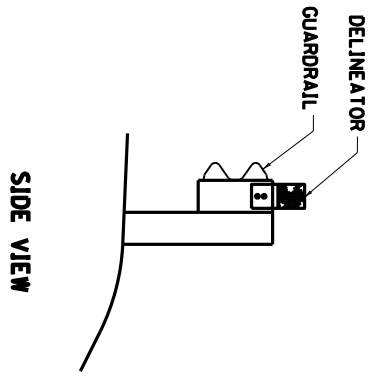
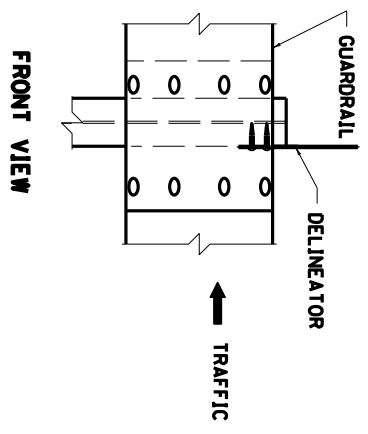
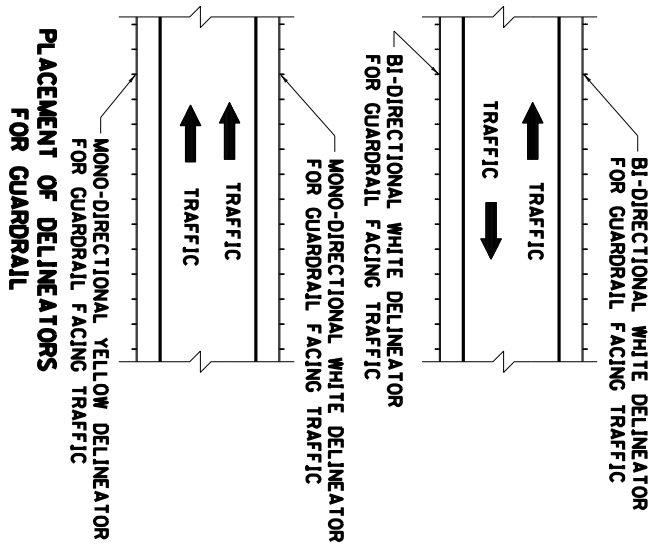
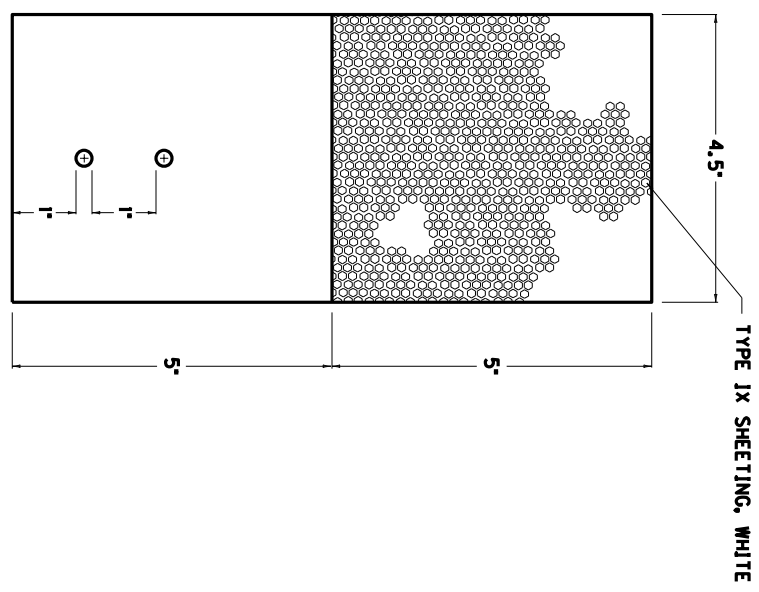
REMOVE BOULDERS



Two (2) large boulders exist along US 60 within the roadway clear-zone at Rt. Sta. 583+14 and Sta. 583+42. The Contractor shall remove and dispose of the existing boulders as approved by the Engineer. The Department will measure the removal of boulders as Each.

NOTES

- BID ITEMS AND UNIT TO BID**
- | DELINERATOR FOR GUARDRAIL (SPECIAL) B/W | EACH |
|--|------|
| 1. BI-DIRECTIONAL WHITE GUARDRAIL DELINEATORS MADE FROM 0.125" ALUMINUM SHEETING MEASURING 4.5" WIDE AND 10" TALL. RETROREFLECTIVE WHITE SHEETING MUST BE TYPE XI AND COVER TOP HALF OF EACH SIDE. TWO 1/4" HOLES 1" APART BEGINNING 1" FROM BOTTOM EDGE SHALL BE PRE-DRILLED IN THE BOTTOM HALF TO AIDE INSTALLATION. | |



APPROXIMATE DELINEATOR SPACING

SPACING	APPROXIMATE DELINEATOR SPACING
TANGENT	100'
CURVE	50'

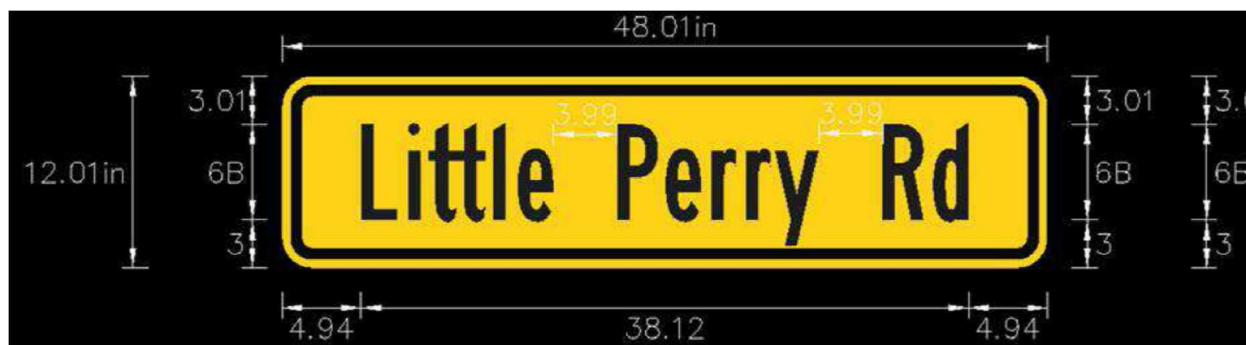
SPACING SHOULD BE ADJUSTED IN CURVES SO THAT SEVERAL DELINEATORS ARE ALWAYS SIMULTANEOUSLY VISIBLE TO THE ROAD USER.

NOT TO SCALE

DETAIL SHEET
DELINERATORS (SPECIAL)
FOR GUARDRAIL

COUNTY OF	ITEM NO.
ROWAN	9-9008.00

Street Name Warning Plaques



End XX Speed Limit Sign



Custom 24x30;

1.5" Radius, 0.4" Border, 0.6" Indent, Black on White;

"END" E; "35" E; "SPEED" E;

"LIMIT" E;

FIGURE 1

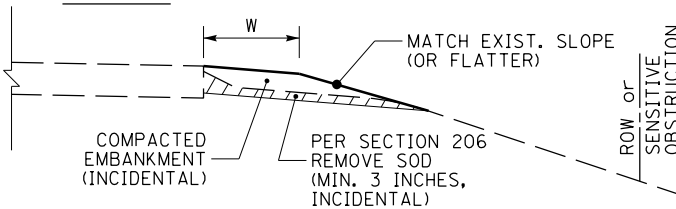


FIGURE 2

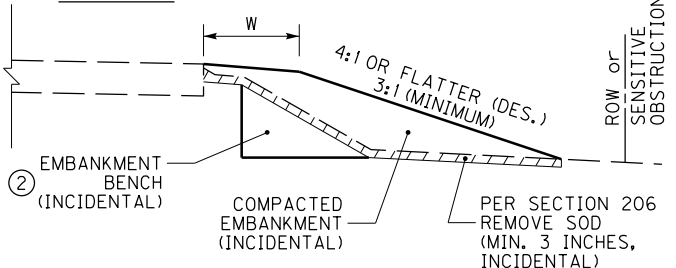


FIGURE 3

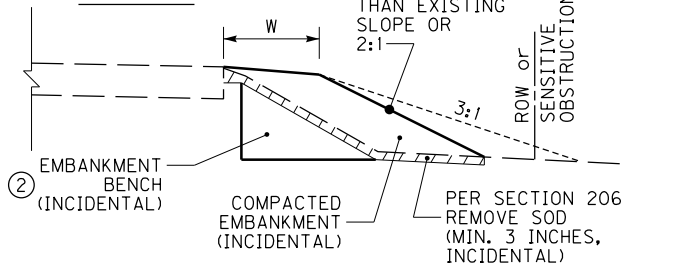


FIGURE 4

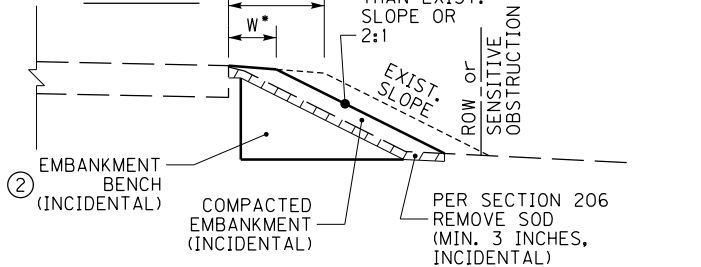


FIGURE 5

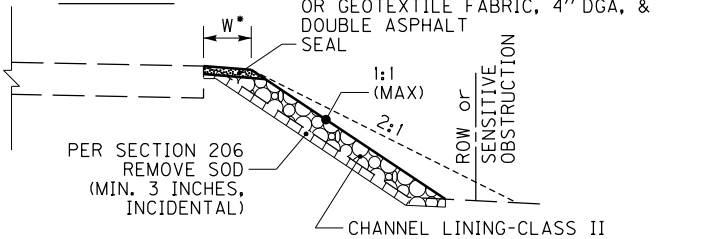
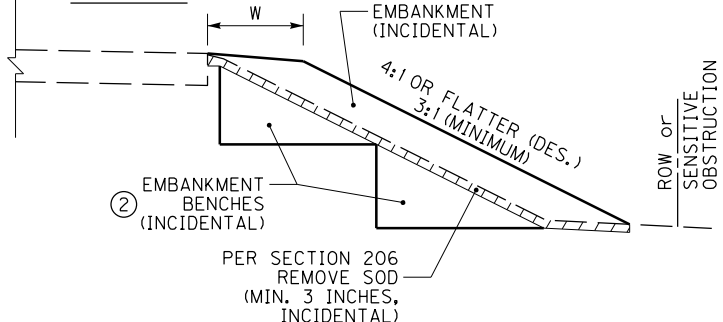


FIGURE 6



~ NOTES ~

BID ITEM AND UNIT TO BID:

2575 - DITCHING & SHOULDERING - LF

1. THE BID ITEM 'DITCHING & SHOULDERING' SHALL CONSIST OF ANY AND ALL NECESSARY CLEARING & GRUBBING, GRADING, AND/OR RESHAPING OF THE EXISTING SHOULDER, DITCH, AND/OR ROADSIDE TO ACHIEVE THE PROPOSED SHOULDER, DITCH, AND/OR ROADSIDE DIMENSIONS, AS DETAILED ON THE TYPICAL SECTIONS. FINAL PAYMENT WILL BE BASED ON THE ACTUAL LINEAR FEET OF DITCHING AND SHOULDERING PERFORMED, AND WILL INCLUDE ALL WORK AND INCIDENTALS NECESSARY TO PERFORM THE DITCHING AND SHOULDERING ACCORDING TO THESE DETAILS, NOTES, AND ANY OTHER INFORMATION FOUND ELSEWHERE IN THE PROPOSAL OR STANDARD SPECIFICATIONS. IN THE CASE OF A DISCREPANCY, REFER TO SECTION 105.05 OF THE STANDARD SPECIFICATIONS. DEPENDING ON THE EXISTING CONDITIONS ENCOUNTERED, DITCHING AND SHOULDERING MAY ALSO INCLUDE, BUT IS NOT LIMITED TO:

- PROVIDING ADDITIONAL EARTH MATERIAL AND GRADING, SHAPING, AND COMPACTING THE EARTH MATERIAL TO ACHIEVE THE DIMENSIONS SHOWN ON THE TYPICAL SECTIONS. COMPACT MATERIAL ACCORDING TO SECTION 206 OF THE STANDARD SPECIFICATIONS.
- NOTE: ADDITIONAL EARTH MATERIAL PROVIDED SHALL BE SUITABLE FOR VEGETATION GROWTH.
- EXCAVATING AND REMOVING EXCESS MATERIAL TO ACHIEVE THE DIMENSIONS SHOWN ON THE TYPICAL SECTIONS
- EMBANKMENT BENCHING

2. EMBANKMENT BENCHING WILL BE REQUIRED WHEN THE EXISTING GROUNDLINE HAS AN INCLINE GREATER THAN 15% (APPROX. 6:1). ANY AND ALL REQUIRED EMBANKMENT BENCHING SHALL BE INCIDENTAL TO THE BID ITEM 'DITCHING AND SHOULDERING'. THE FOLLOWING ARE GUIDELINES FOR EMBANKMENT BENCHING USED IN CONJUNCTION WITH THE BID ITEM 'DITCHING AND SHOULDERING':

- THE TYPICAL HEIGHT (OR RISE) IS 1' TO 6'
- THE TYPICAL WIDTH (OR RUN) WILL VARY BASED ON THE HEIGHT OF THE BENCH
- MULTIPLE SMALL BENCHES MAY BE USED, AND MAY BE MORE ADVANTAGEOUS AS THIS WILL REQUIRE PROCESSING LESS EARTHWORK.

3. AS SHOWN IN FIGURE 1, IN SOME SITUATIONS, MINOR SHOULDERING, WITH MINIMAL ADDITIONAL EARTH MATERIAL, MAY BE ALL THAT IS REQUIRED TO RESHAPE THE EARTH SHOULDER TO THE PROPOSED WIDTH AND BRING IT FLUSH WITH THE EDGE OF PAVEMENT.
4. AS SHOWN IN FIGURE 2, MOST SITUATIONS WILL REQUIRE ADDITIONAL EARTH MATERIAL TO ACHIEVE THE PROPOSED EARTH SHOULDER WIDTH. IT IS DESIRED THAT THE RESULTING FILL SLOPE BE INSTALLED AS FLAT AS POSSIBLE AND REMAIN WITHIN THE RIGHT-OF-WAY AND/OR AVOID SENSITIVE OBSTRUCTIONS.
5. AS SHOWN IN FIGURE 3, IF A 3:1 FILL SLOPE WILL RESULT IN THE TOE OF SLOPE EXTENDING BEYOND THE RIGHT-OF-WAY OR IMPACT A SENSITIVE OBSTRUCTION, THEN THE FILL SLOPE MAY BE INSTALLED STEEPER THAN 3:1, BUT NO STEEPER THAN THE EXISTING FILL SLOPE, OR A 2:1, WHICHEVER IS FLATTER.
6. AS SHOWN IN FIGURE 4, IF MATCHING THE EXISTING FILL SLOPE OR INSTALLING A 2:1 FILL SLOPE (WHICHEVER IS FLATTER) STILL RESULTS IN THE TOE OF SLOPE EXTENDING BEYOND THE RIGHT-OF-WAY OR STILL IMPACTS A SENSITIVE OBSTRUCTION, THEN THE PROPOSED EARTH SHOULDER WIDTH MAY BE REDUCED SO THAT THE RESULTING TOE OF SLOPE WILL REMAIN WITHIN THE RIGHT-OF-WAY AND/OR NOT IMPACT THE SENSITIVE OBSTRUCTION.

7. AS SHOWN IN FIGURE 5, IF THE EXISTING FILL SLOPE IS STEEPER THAN 2:1 AND THERE IS NOT ENOUGH SPACE TO INSTALL A 2:1 FILL SLOPE WITHOUT EXTENDING BEYOND THE RIGHT-OF-WAY AND/OR IMPACTING A SENSITIVE OBSTRUCTION, THEN CLASS II CHANNEL LINING MAY BE INSTALLED ALONG THE STEEP EXISTING SLOPE IN ORDER TO ESTABLISH A WIDTH OF AGGREGATE SHOULDER. THESE LOCATIONS WILL BE NOTED ELSEWHERE IN THE PROPOSAL AS SLOPE PROTECTION. THE CHANNEL LINING IS TO BE CAPPED WITH GEOTEXTILE FABRIC TYPE IV AND 4" OF CRUSHED STONE BASE, OR 4" OF DGA WITH DOUBLE ASPHALT SEAL COAT.
8. AS SHOWN IN FIGURE 6, AS THE HEIGHT OF THE FILL INCREASES, MULTIPLE EMBANKMENT BENCHES MAY BE REQUIRED.

SEE SHEET 2 FOR NOTES 9 THRU 13

KENTUCKY
DEPARTMENT OF HIGHWAYS

DITCHING & SHOULDERING
AND EMBANKMENT
BENCHING DETAILS
(SHEET 1 OF 2)

NOT TO SCALE

FIGURE 7

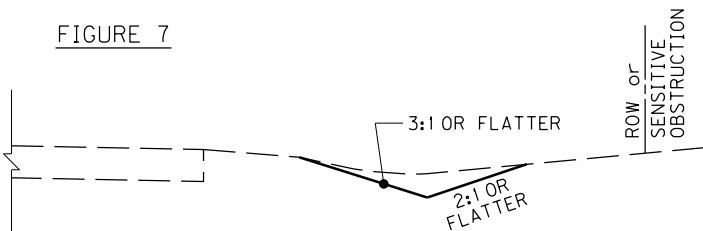


FIGURE 8

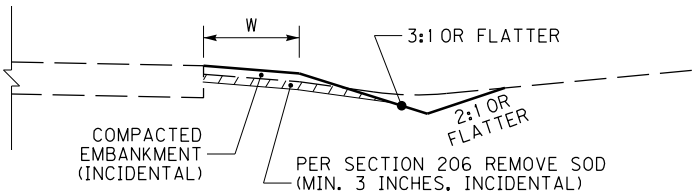


FIGURE 9

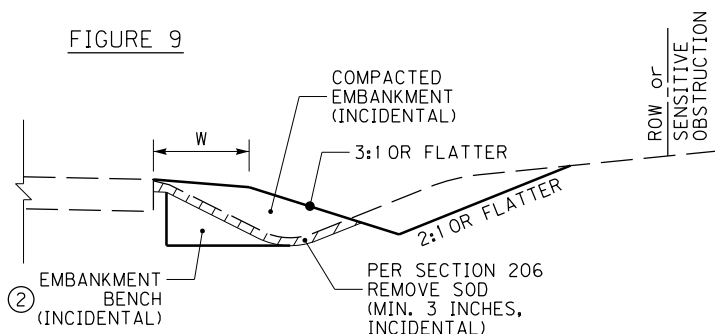


FIGURE 10

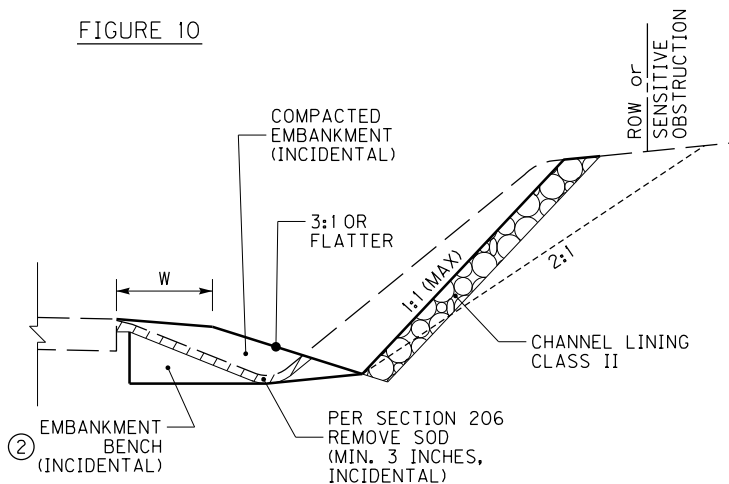
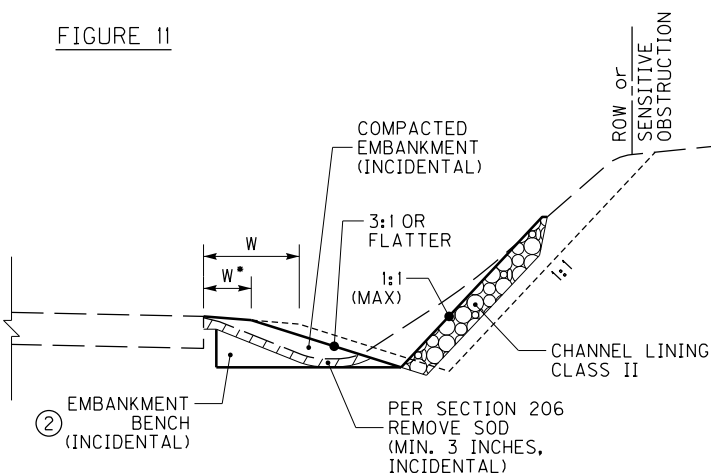


FIGURE 11



~ NOTES ~

BID ITEM AND UNIT TO BID:
2575 - DITCHING & SHOULDERING - LF

1. THE BID ITEM 'DITCHING & SHOULDERING' SHALL CONSIST OF ANY AND ALL NECESSARY CLEARING & GRUBBING, GRADING, AND/OR RESHAPING OF THE EXISTING SHOULDER, DITCH, AND/OR ROADSIDE TO ACHIEVE THE PROPOSED SHOULDER, DITCH, AND/OR ROADSIDE DIMENSIONS, AS DETAILED ON THE TYPICAL SECTIONS. FINAL PAYMENT WILL BE BASED ON THE ACTUAL LINEAR FEET OF DITCHING AND SHOULDERING PERFORMED, AND WILL INCLUDE ALL WORK AND INCIDENTALS NECESSARY TO PERFORM THE DITCHING AND SHOULDERING ACCORDING TO THESE DETAILS, NOTES, AND ANY OTHER INFORMATION FOUND ELSEWHERE IN THE PROPOSAL OR STANDARD SPECIFICATIONS. IN THE CASE OF A DISCREPANCY, REFER TO SECTION 105.05 OF THE STANDARD SPECIFICATIONS. DEPENDING ON THE EXISTING CONDITIONS ENCOUNTERED, DITCHING AND SHOULDERING MAY ALSO INCLUDE, BUT IS NOT LIMITED TO:

- PROVIDING ADDITIONAL EARTH MATERIAL AND GRADING, SHAPING, AND COMPACTING THE EARTH MATERIAL TO ACHIEVE THE DIMENSIONS SHOWN ON THE TYPICAL SECTIONS. COMPACT MATERIAL ACCORDING TO SECTION 206 OF THE STANDARD SPECIFICATIONS.
- NOTE: ADDITIONAL EARTH MATERIAL PROVIDED SHALL BE SUITABLE FOR VEGETATION GROWTH.
- EXCAVATING AND REMOVING EXCESS MATERIAL TO ACHIEVE THE DIMENSIONS SHOWN ON THE TYPICAL SECTIONS
- EMBANKMENT BENCHING

② EMBANKMENT BENCHING WILL BE REQUIRED WHEN THE EXISTING GROUNDLINE HAS AN INCLINE GREATER THAN 15% (APPROX. 6:1). ANY AND ALL REQUIRED EMBANKMENT BENCHING SHALL BE INCIDENTAL TO THE BID ITEM 'DITCHING AND SHOULDERING'. THE FOLLOWING ARE GUIDELINES FOR EMBANKMENT BENCHING USED IN CONJUNCTION WITH THE BID ITEM 'DITCHING AND SHOULDERING':

- THE TYPICAL HEIGHT (OR RISE) IS 1' TO 6'
- THE TYPICAL WIDTH (OR RUN) WILL VARY BASED ON THE HEIGHT OF THE BENCH
- MULTIPLE SMALL BENCHES MAY BE USED, AND MAY BE MORE ADVANTAGEOUS AS THIS WILL REQUIRE PROCESSING LESS EARTHWORK.

SEE SHEET 1 FOR NOTES 3. THRU 8.

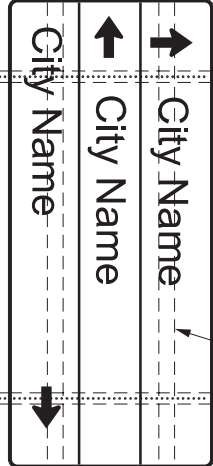
9. AS SHOWN IN FIGURE 7, IN SOME SITUATIONS, ALL THAT MAY BE REQUIRED IS TO CLEAN OUT THE EXISTING DITCH AND RESHAPE IT TO THE PROPOSED DIMENSIONS. THE MATERIAL EXCAVATED FROM THE DITCH MAY BE RE-USED ELSEWHERE ON THE PROJECT, PROVIDED THE ENGINEER DETERMINES THE MATERIAL REMOVED FROM THE DITCH IS SUITABLE FOR THE INTENDED RE-USE.
10. AS SHOWN IN FIGURE 8, IN SOME SITUATIONS, THE DITCH AND SHOULDER MAY ONLY NEED MINOR REGRADING AND/OR RESHAPING. THE MATERIAL EXCAVATED FROM THE DITCH MAY BE USED TO RESHAPE THE EARTH SHOULDER, PROVIDED THE ENGINEER DETERMINES THE MATERIAL REMOVED FROM THE DITCH IS SUITABLE FOR SHOULDERING. IF THE MATERIAL IS NOT SUITABLE, ADDITIONAL EARTH MATERIAL MAY BE REQUIRED.
11. AS SHOWN IN FIGURE 9, IN MOST SITUATIONS, REGRADING AND RESHAPING THE ROADSIDE TO ACHIEVE THE PROPOSED SHOULDER, DITCH, AND/OR ROADSIDE DIMENSIONS WILL RESULT IN MOVING THE DITCH FURTHER AWAY FROM THE ROADWAY. IT IS DESIRED THAT DITCH FORESLOPES BE 3:1 OR FLATTER AND DITCH BACKSLOPES BE 2:1 OR FLATTER.
12. AS SHOWN IN FIGURE 10, IF INSTALLING A 2:1 DITCH BACKSLOPE WILL RESULT IN THE TOP OF CUT EXTENDING BEYOND THE RIGHT-OF-WAY OR IMPACTING A SENSITIVE OBSTRUCTION, THEN THE DITCH BACK SLOPE MAY BE INSTALLED STEEPER THAN 2:1, UP TO 1:1 MAXIMUM. IN THIS SITUATION, THE DITCH BACKSLOPE SHALL HAVE CLASS II CHANNEL LINING INSTALLED FOR SLOPE PROTECTION.
13. AS SHOWN IN FIGURE 11, IF USING A 1:1 DITCH BACKSLOPE STILL RESULTS IN THE TOP OF CUT EXTENDING BEYOND THE RIGHT-OF-WAY OR STILL IMPACTS A SENSITIVE OBSTRUCTION, THEN THE PROPOSED EARTH SHOULDER WIDTH MAY BE REDUCED SO THAT THE STEEP DITCH BACKSLOPE CAN BE INSTALLED WITHIN THE RIGHT-OF-WAY AND/OR TO AVOID A SENSITIVE OBSTRUCTION.

KENTUCKY
DEPARTMENT OF HIGHWAYS

DITCHING & SHOULDERING
AND EMBANKMENT
BENCHING DETAILS
(SHEET 2 OF 2)

NOT TO SCALE

COUNTY OF	ITEM NO.	SHEET NO.



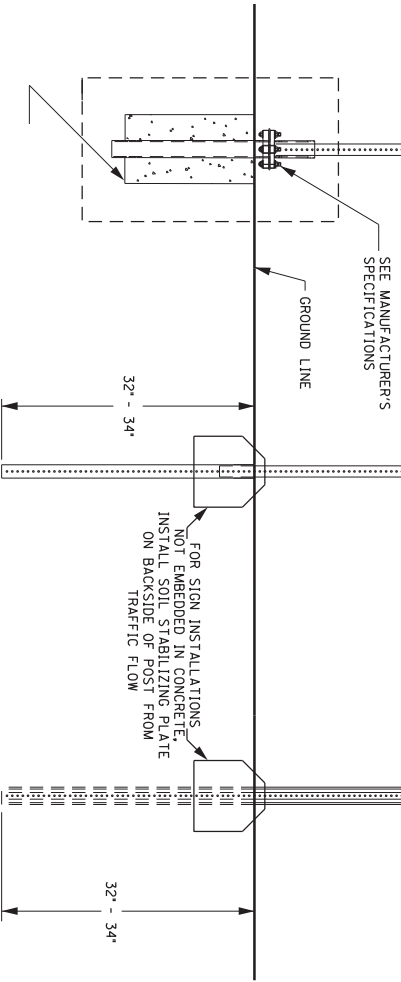
SEE SHEETING SIGN DETAIL SHEET 2 OF 2 FOR BRACING REQUIREMENTS

NOTE: SEE SIGN DETAIL SHEETS FOR QUANTITY, LENGTH, SIZE AND GAUGE OF TYPE I POSTS

PLAN VIEW
NOT TO SCALE

PLAN VIEW
NOT TO SCALE

PLAN VIEW
NOT TO SCALE



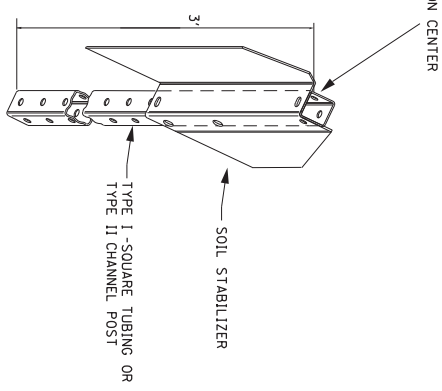
TYPE I
SQUARE TUBING POST
WITH TYPE "D" SUPPORT

TYPE I
SQUARE TUBING POST
WITH SOIL STABILIZER

TYPE II
CHANNEL POST
WITH SOIL STABILIZER

FOR SIGN INSTALLATIONS NOT EMBEDDED IN CONCRETE, INSTALL SOIL STABILIZING PLATE ON BACKSIDE OF POST FROM TRAFFIC FLOW

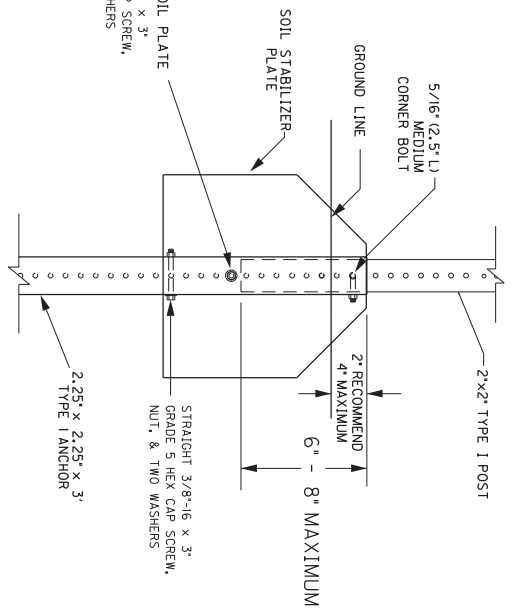
SEE MANUFACTURER'S SPECIFICATIONS



PLAN VIEW
NOT TO SCALE



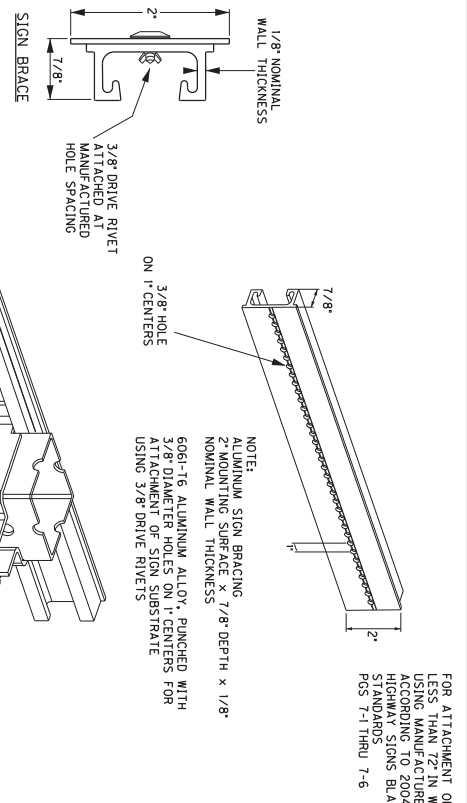
ADDED HOLE IN SOIL PLATE
STRAIGHT 3/8"-16 x 3"
GRADE 5 HEX CAP SCREW,
NUT, & TWO WASHERS



SOIL STABILIZER DETAIL
FOR TYPE I POST

NOT TO SCALE

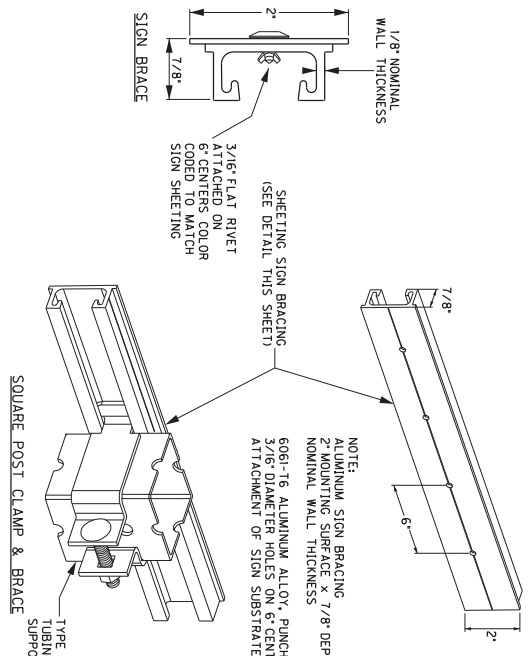
SHEETING SIGN DETAIL
SHEET 1 OF 2



FOR ATTACHMENT OF SIGNS LESS THAN 72" IN WIDTH USING MANUFACTURED 3/8" HOLES ACCORDING TO 2004 STANDARD HIGHWAY SIGNS BLANK STANDARDS POST 7-1 THRU 7-6

NOTE:
ALUMINUM SIGN BRACING 2" MOUNTING SURFACE x NOMINAL WALL THICKNESS
6061-T6 ALUMINUM ALLOY, PUNCHED WITH 3/8" DIAMETER HOLES ON 1" CENTERS FOR ATTACHMENT OF SIGN SUBSTRATE USING 3/8" DRIVE RIVETS

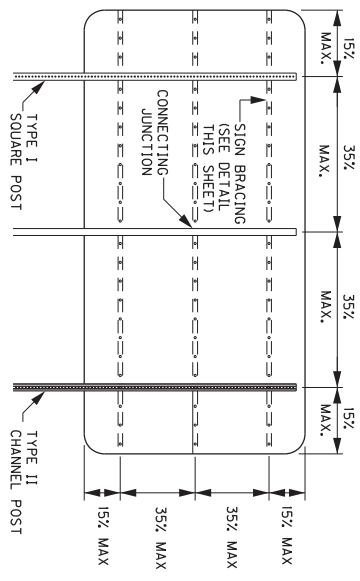
SQUARE POST CLAMP & BRACE
TYPE I SQUARE POST



FOR ATTACHMENT OF SIGNS GREATER THAN, OR EQUAL TO, 72" IN WIDTH,
RIVETS SHALL BE COLOR CODED TO MATCH SHEETING IN ORDER TO MINIMIZE GLARE FROM RIVETS

NOTE:
ALUMINUM SIGN BRACING 2" MOUNTING SURFACE x 7/8" DEPTH x 1/8" NOMINAL WALL THICKNESS
6061-T6 ALUMINUM ALLOY, PUNCHED WITH 3/8" DIAMETER HOLES ON 6" CENTERS FOR ATTACHMENT OF SIGN SUBSTRATE USING RIVETS

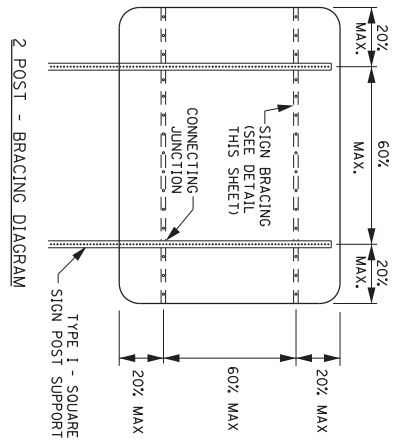
SQUARE POST CLAMP & BRACE
TYPE I SQUARE TUBING SIGN SUPPORT



3 POST - BRACING DIAGRAM

NOTE:
1. MAXIMUM AREA PER CONNECTING JUNCTION = 16 SQ. FT.

2. BRACING SHOULD NOT BE SPLICED WITHIN 6" OF A BRACE TO POST JUNCTION.



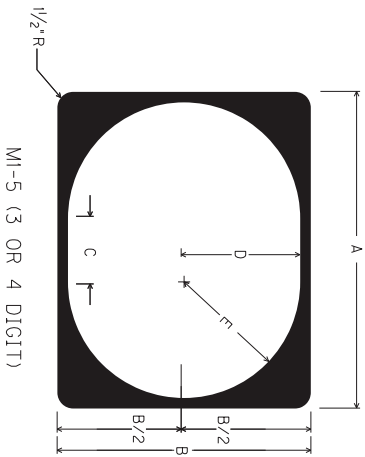
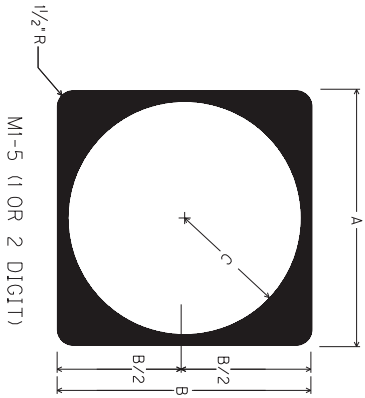
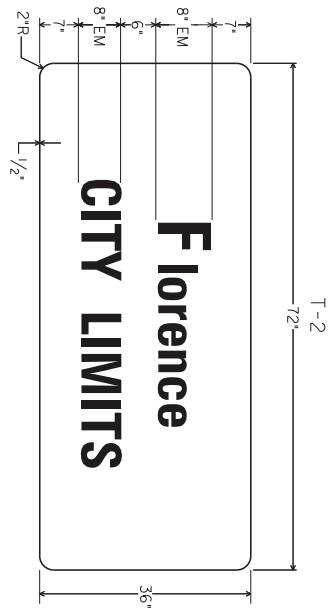
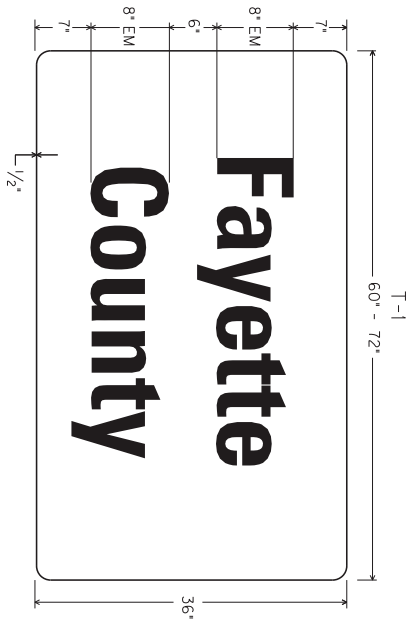
2 POST - BRACING DIAGRAM

NOTE:
USE OF SIGN BRACING NOT SHOWN ON THIS SHEET MAY BE PERMITTED BY PROJECT ENGINEER AND/OR DISTRICT TRAFFIC ENGINEER.

NOT TO SCALE
SHEETING SIGN DETAIL
SHEET 2 OF 2

COUNTY OF	ITEM NO.	SHEET NO.

COUNTY OF	ITEM NO.	SHEET NO.

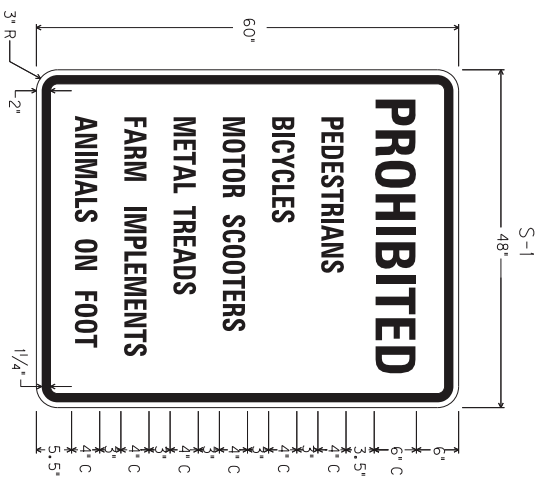


	A	B	C	FONT
CONVENTIONAL	24"	24"	11"	12D
EXPRESSWAY/ FREEWAY	36"	36"	17"	18D

	A	B	C	D	E	FONT	
						3 DIGIT	4 DIGIT
CONVENTIONAL	30"	24"	6"	11"	11"	12D	12B
EXPRESSWAY/ FREEWAY	45"	36"	9"	16.5"	16.5"	18D	18B

NOTE: FOR ROUTE MARKERS, IF NECESSARY, ADJUSTMENTS TO THE DIGIT LAYOUT AND/OR FONT TYPE MAY BE MADE TO ENSURE VISUAL ACUITY

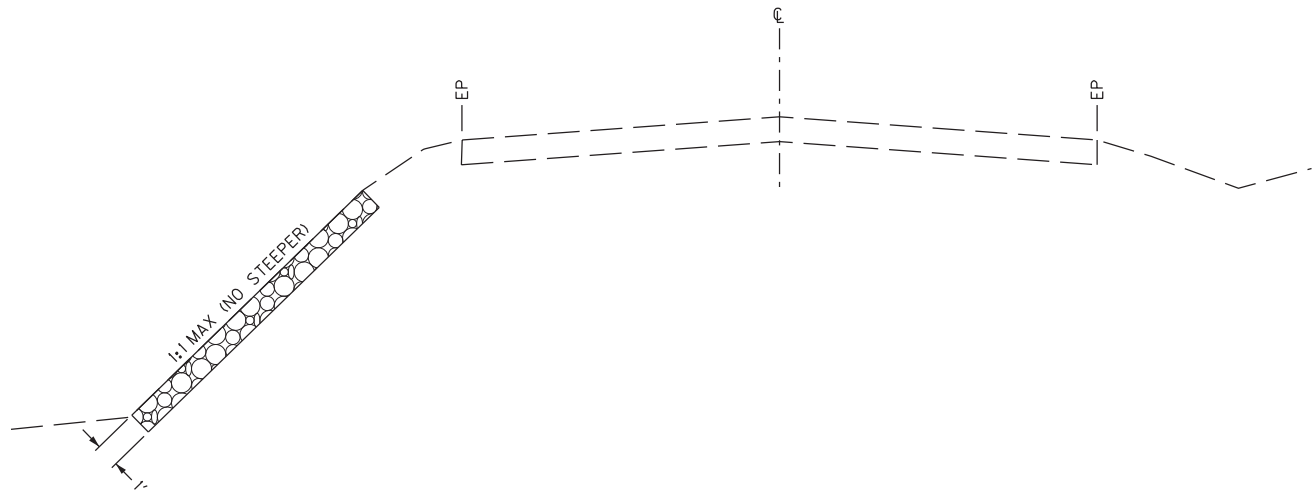
NOTE: EXPRESSWAY/FREEWAY DEFINED AS A DIVIDED HIGHWAY WITH PARTIAL OR FULL CONTROL OF ACCESS



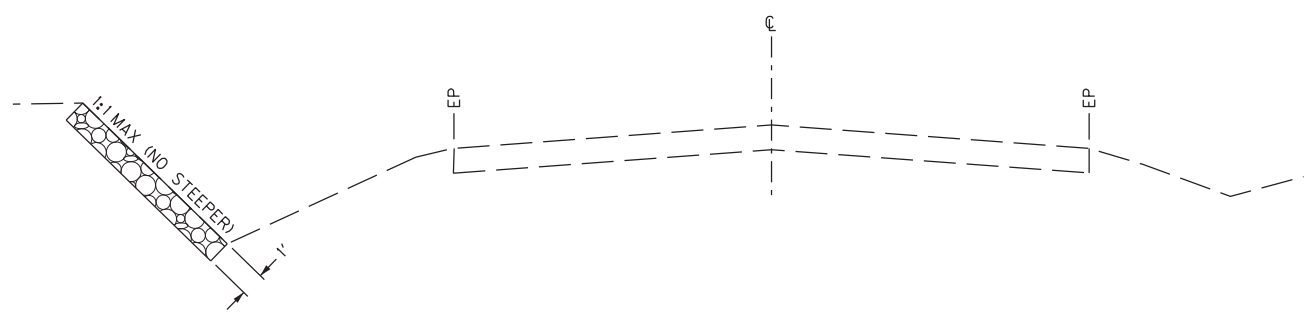
NOT TO SCALE

TYPICAL SIGNS

COUNTY OF	ITEM NO.	SHEET NO.



PROTECTION DETAIL FOR EMBANKMENT FILL SLOPE

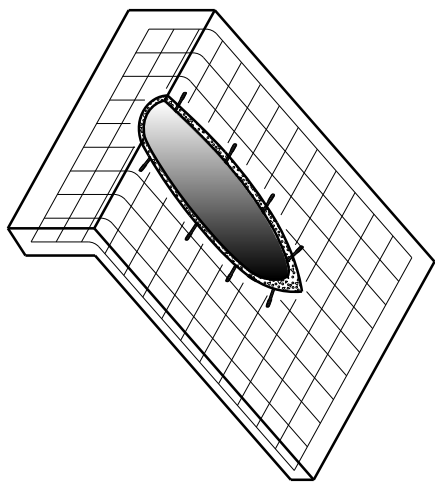
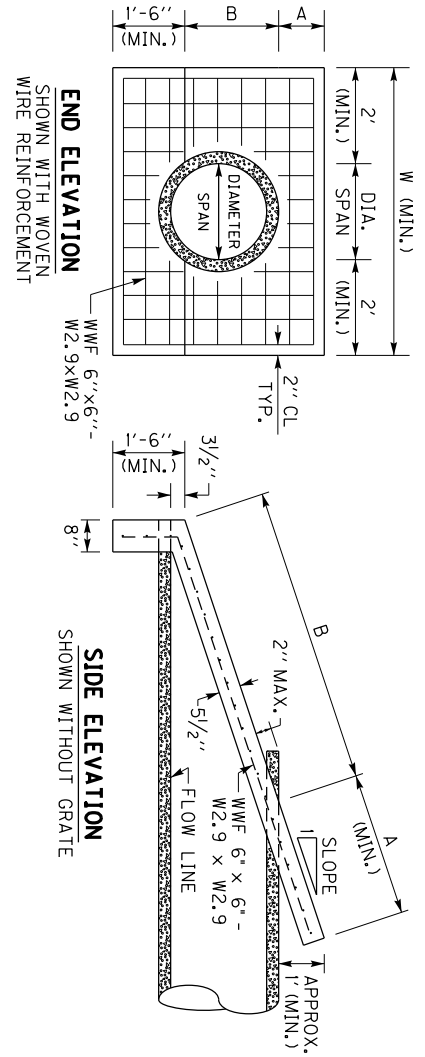


PROTECTION DETAIL FOR DITCH BACKSLOPE

NOTES:

1. SEE CHANNEL LINING SUMMARY FOR APPROXIMATE LOCATIONS OF SLOPE PROTECTION.
2. FINAL LOCATIONS TO BE DETERMINED BY THE ENGINEER.
3. EXCAVATION IS INCIDENTAL TO THE PLACEMENT OF THE CHANNEL LINING.

SLOPE PROTECTION DETAILS



ISOMETRIC VIEW
SHOWN WITH WOVEN
WIRE REINFORCEMENT
AND WEDGE ANCHORS

DIMENSIONS AND CONCRETE QUANTITIES

PIPE SIZE	3:1 SLOPE			4:1 SLOPE			6:1 SLOPE			GRATE REQUIRED
	A	B	W	A	B	W	A	B	W	
15"	3'-7 1/2"	5'-3"	0.74	4'-8 3/4"	5'-3"	0.93	6'-11 3/4"	5'-3"	1.29	NO
18"	3'-4'-5 3/4"	5'-6"	0.85	4'-5'-10"	5'-6"	1.05	8'-7 1/4"	5'-6"	1.48	NO
24"	3'-6'-2 1/2"	6'-0"	1.05	4'-8'-1"	6'-0"	1.32	11'-11"	6'-0"	1.87	SEE ⑦
30"	3'-7'-10 3/4"	6'-6"	1.43	4'-10'-3 3/4"	6'-6"	1.80	15'-2 1/2"	6'-6"	2.28	SEE ⑦

NOTE: CONCRETE QUANTITIES ARE LISTED FOR INFORMATIONAL PURPOSES ONLY.

NOTES

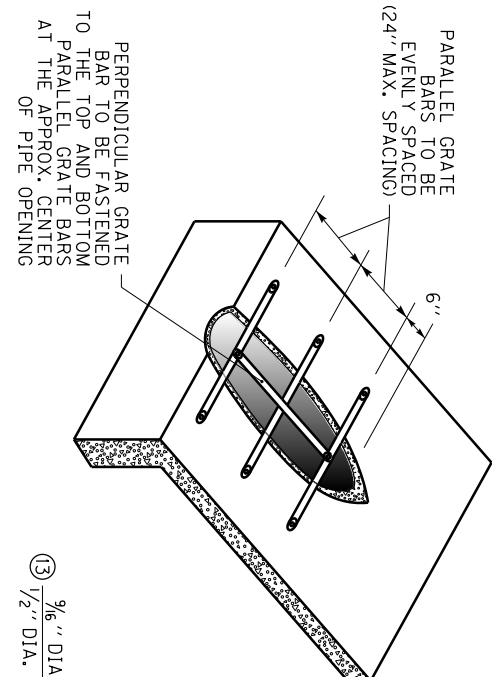
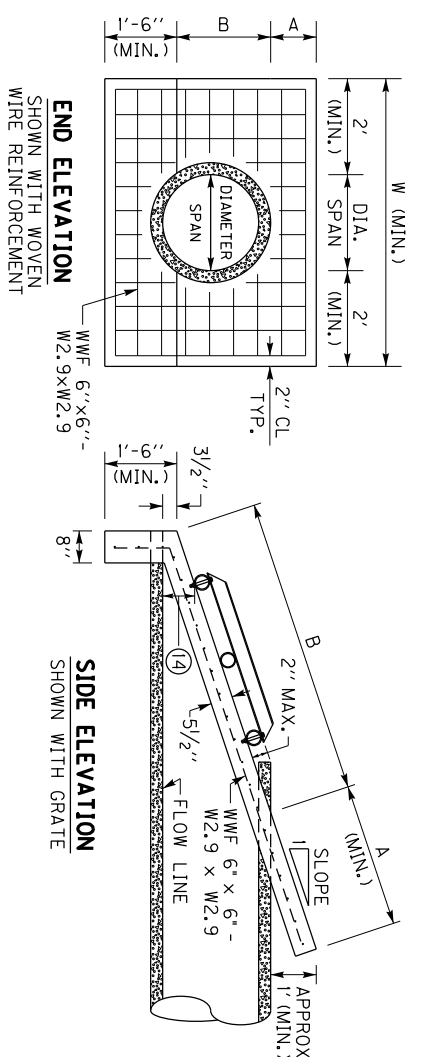
- BID ITEM AND UNIT TO BID: 24575ES610 HEADWALL (SLOPED & MITERED CONCRETE-FOR 1" INCH PIPE) - EACH
- THE EMBANKMENT FILL MATERIAL IS TO BE PLACED, COMPACTED, AND GRADED AROUND THE PIPE BEFORE THE CONCRETE SLOPE PAVING IS PLACED. THE INTENT IS FOR THE SLOPED & MITERED HEADWALL TO MATCH THE FINAL EMBANKMENT SLOPE.
- THE PIPE SHALL BE MITERED AFTER THE CONCRETE SLOPE PAVING HAS BEEN PLACED AND SUFFICIENTLY CURED. THE PIPE SHOULD BE MITERED AS CLOSE TO FLUSH WITH THE SLOPE PAVING AS POSSIBLE, AND NO HIGHER THAN 2" ABOVE THE SLOPE PAVING. HAND FINISHING AND/OR CUTTING MAY BE NECESSARY.
- THE DIMENSION 'A' IS BASED ON THE FINAL GRADED SLOPE. THE DIMENSION 'B' IS BASED ON CIRCULAR REINFORCED CONCRETE PIPE AT 0° SKEW FOR THE LISTED SLOPE. THE DIMENSION 'W' IS BASED ON THE DIAMETER, OR SPAN, OF THE PIPE. NOTE: THE HEADWALL DIMENSIONS AND CONCRETE QUANTITIES MAY VARY BASED ON THE FINAL GRADED SLOPE, PIPE SKEW, AND/OR TYPE OF PIPE.
- WOVEN WIRE REINFORCEMENT (WWF 6"x6" - W2.9xW2.9) IS REQUIRED FOR THE SLOPE PAVING AND TOE WALL. UTILIZE 2" CLEARANCE FROM ALL EDGES.
- CONCRETE QUANTITIES SHOWN ARE FOR ONE (1) HEADWALL.
- AFTER THE PIPE HAS BEEN MITERED, ANCHOR THE PIPE TO THE CONCRETE SLOPE PAVING BY CORE DRILLING AND INSTALLING 1/2" DIAMETER x 7" LENGTH STEEL WEDGE ANCHORS (3" MINIMUM EMBEDMENT) ON 18" CENTERS ALONG THE SIDES OF THE PIPE. HOLE SIZE & DEPTH, TORQUE, & INSTALLATION PROCEDURES PER RECOMMENDATION OF ANCHOR MANUFACTURE. NOTE: STEEL WEDGE ANCHORS ARE NOT REQUIRED FOR REINFORCED CONCRETE PIPE.
- THE FOLLOWING SITUATIONS REQUIRE A HEADWALL WITH A GRATE:
 - 24" DIAMETER PIPE ON GREATER THAN 30° SKEW
 - 30" DIAMETER PIPE ON GREATER THAN 15° SKEW
 - PIPE WITH GREATER THAN 30" DIAMETER.
 - ELLIPTICAL PIPE GREATER THAN 24" EQUIVALENT DIAMETER
- SEE SHEET 2 FOR GRATE DETAILS
- ALL BOLTS AND HARDWARE SHALL BE RUST RESISTANT: ZINC PLATED, STAINLESS STEEL, OR STEEL THAT HAS BEEN GALVANIZED IN ACCORDANCE WITH AASHTO M 232.

NOT TO SCALE

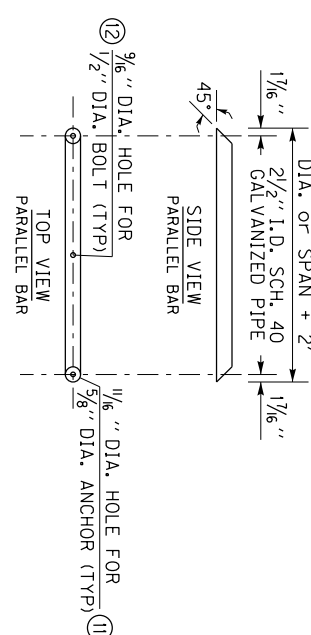
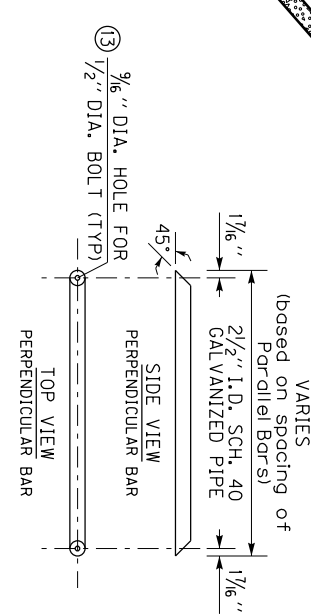
SEE SHEET 2 FOR DIMENSIONS OF HEADWALLS FOR PIPE OVER 30" DIAMETER

KENTUCKY
DEPARTMENT OF HIGHWAYS
SLOPED & MITERED CONCRETE HEADWALL (SHEET 1 OF 2)

COUNTY OF	TOWN NO.	SHEET NO.
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ISOMETRIC VIEW
SHOWING HEADWALL WITH GRATE



PIPE FOR GRATE DETAILS
SEE NOTE 6 TO DETERMINE IF GRATE IS REQUIRED

NOT TO SCALE

- ~ NOTES ~
1. BID ITEM AND UNIT TO BID: 24575ES610 HEADWALL (SLOPED & MITERED CONCRETE-FOR 1/2 INCH PIPE) - EACH SEE SHEET 1 FOR NOTES 1 THRU 5
 2. THE FOLLOWING SITUATIONS REQUIRE A HEADWALL WITH A GRATE:
 7. 24" DIAMETER PIPE ON GREATER THAN 30° SKEW
 8. 30" DIAMETER PIPE ON GREATER THAN 15° SKEW
 9. PIPE WITH GREATER THAN 30" DIAMETER
 10. ELLIPTICAL PIPE GREATER THAN 24" EQUIVALENT DIAMETER
 3. ALL BOLTS AND HARDWARE SHALL BE RUST RESISTANT: ZINC PLATED, STAINLESS STEEL, OR STEEL THAT HAS BEEN GALVANIZED IN ACCORDANCE WITH AASHTO M 232.
 4. THE PIPE USED TO CONSTRUCT THE GRATE SHALL BE STEEL, SCHEDULE 40, CONFORMING TO ASTM A53, AND GALVANIZED IN ACCORDANCE WITH AASHTO M 111 AFTER FABRICATION.
 5. ANY RAW METAL EXPOSED BY FIELD CUTTING AND/OR DRILLING SHALL BE TREATED WITH A COLD GALVANIZING COMPOUND.
 6. FASTEN PARALLEL BARS TO HEADWALL WITH 5/8" DIA. x 4 1/2" LENGTH STEEL WEDGE ANCHORS, MINIMUM EMBEDMENT = 2 3/4" HOLE SIZE AND DEPTH, TORQUE, & INSTALLATION PROCEDURES PER RECOMMENDATION OF ANCHOR MANUFACTURE
 7. CENTER BOLT HOLE SHALL ONLY BE DRILLED IN THE TOP AND BOTTOM PARALLEL BARS.
 8. FASTEN THE PERPENDICULAR BAR TO THE TOP AND BOTTOM PARALLEL BARS WITH 1/2" DIA. x 4" LENGTH HEX HEAD BOLTS, HEX HEAD NUTS, & FLAT WASHERS.
 9. THE BOTTOM PARALLEL BAR IS TO BE PLACED SO THAT IT IS APPROX. 6" ABOVE THE FLOWLINE OF THE PIPE.

PIPE SIZE	3:1 SLOPE			4:1 SLOPE			6:1 SLOPE			GRATE REQUIRED
	A	B	W	A	B	W	A	B	W	
36"	3'	9'-7 1/2"	7'-0"	4'	12'-6 1/2"	7'-0"	6'	18'-6"	7'-0"	YES
42"	3'	11'-4"	7'-6"	4'	14'-9 1/4"	7'-6"	6'	21'-9 1/2"	7'-6"	YES

DIMENSIONS AND CONCRETE QUANTITIES

NOTE: CONCRETE QUANTITIES ARE LISTED FOR INFORMATIONAL PURPOSES ONLY.

SEE SHEET 1 FOR DIMENSIONS OF HEADWALLS FOR PIPE 30" DIAMETER & LESS

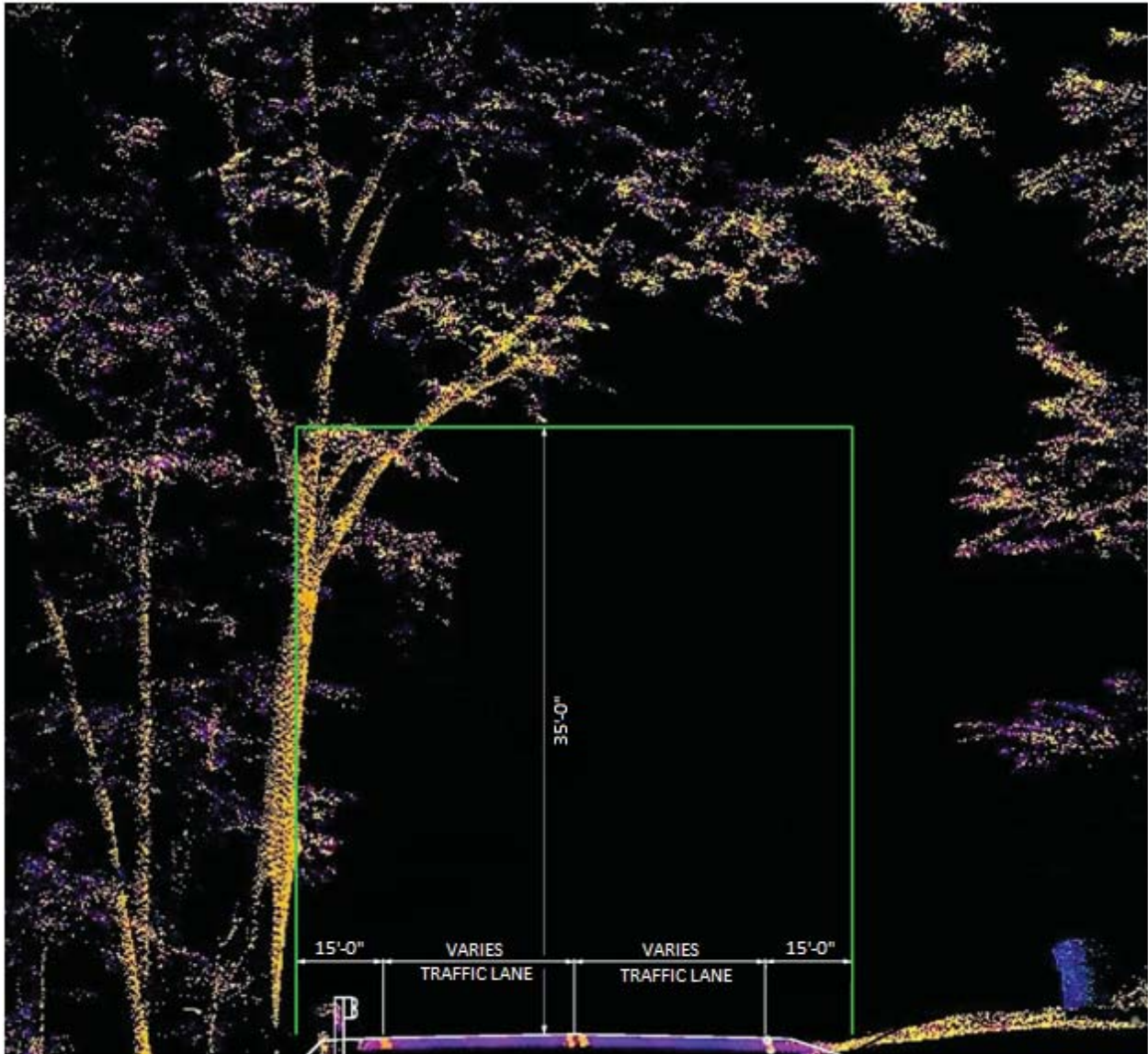
KENTUCKY
DEPARTMENT OF HIGHWAYS

SLOPED & MITERED
CONCRETE HEADWALL
(SHEET 2 OF 2)

COUNTY OF	TOWN NO.	SHEET NO.
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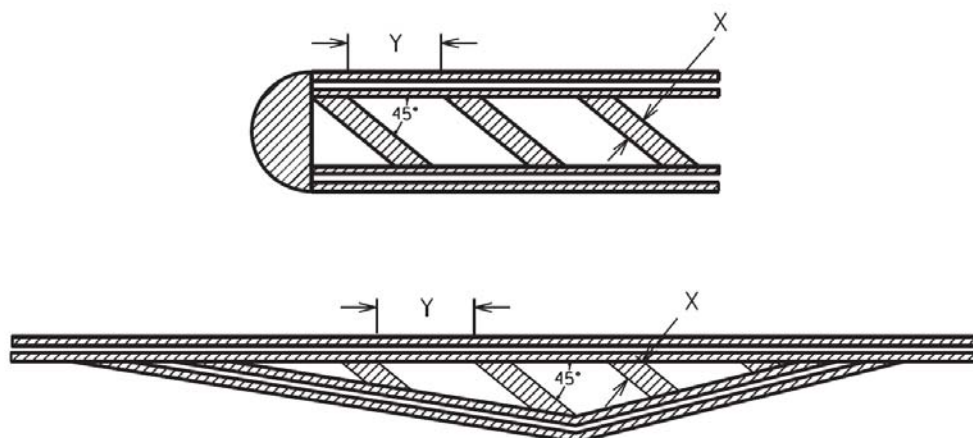
TREE CLEARING DETAIL

Clearing offset: 15 feet from edge of pavement, both sides, cutting with a vertical reach of 35 feet



CROSS-HATCH PAVEMENT MARKINGS DETAIL

TYPICAL CROSS-HATCH MARKINGS



The cross-hatch pavement marking width (X) and spacing (Y) will usually be specified in the plans. The width to spacing values usually have a ratio of 1:10. If the plans do not specify the width (X) and spacing (Y) the Engineer will provide the contractor with the X and Y values for each cross-hatch installation. If necessary, the Engineer may obtain guidance from the District Traffic Engineer and/or the Division of Traffic Operations.

NOTE: Adjust the width and spacing of the cross-hatch pavement markings as necessary so that a minimum of three (3) cross-hatch markings are placed within the area being marked. The 1:10 ratio between width and spacing values should be maintained as much as possible.

Refer to Section 717 of the Standard Specifications for Road and Bridge Construction, current edition, for more information concerning Material and Construction specifications.

The Department will measure the finished in-place area of Cross-Hatch Pavement Markings in Square Feet. The Department will NOT measure overlaps or the void space between cross-hatching. See Section 717.04 for additional measurement information.

When listed in the bid items, the Department will make payment for the completed and accepted quantities of Cross-Hatch Pavement Markings under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
06569	Pave Marking-Thermo Cross-Hatch	Square Foot
23253ES717	Pave Mark TY 1 Tape Cross Hatch	Square Foot

TYPICAL SECTION DEPICTING INSTALLATION OF RECYCLED RAILROAD RAIL PLACED IN DRILLED SOCKET FOR LANDSLIDE CORRECTION

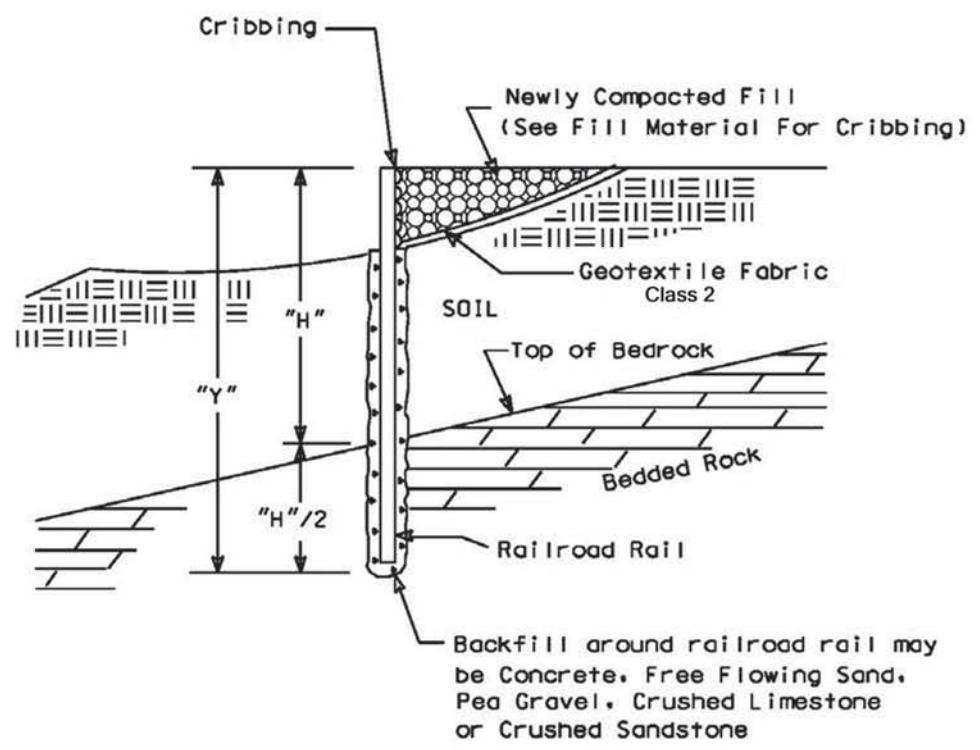
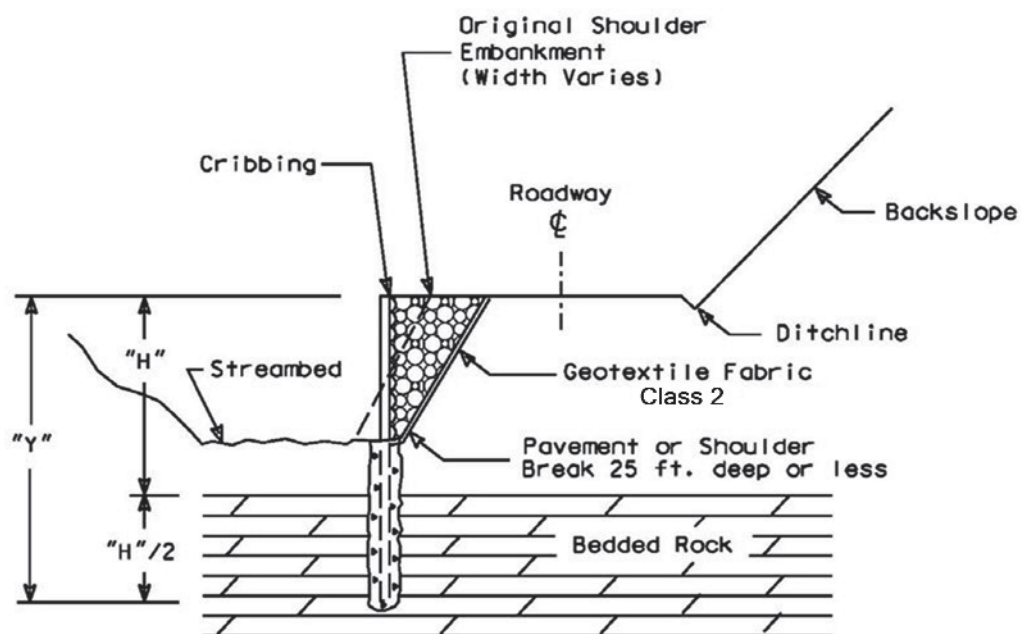


Figure 1

TYPICAL CROSS SECTION OF ROADWAY REPAIRS UTILIZING RECYCLED RAILROAD RAILS IN DRILLED SOCKETS FOR EMBANKMENT EROSION CORRECTION

NOTE:
Spacing from edge to
edge of drilled
socket : 3 ft. max.



NOTE :
"H"/2 Depth of Rail into bedded rock =
1/3 total length where rock is present.

Figure 2

ALTERNATE SCHEMES FOR INSTALLING RAILROAD RAILS IN DRILLED SOCKETS

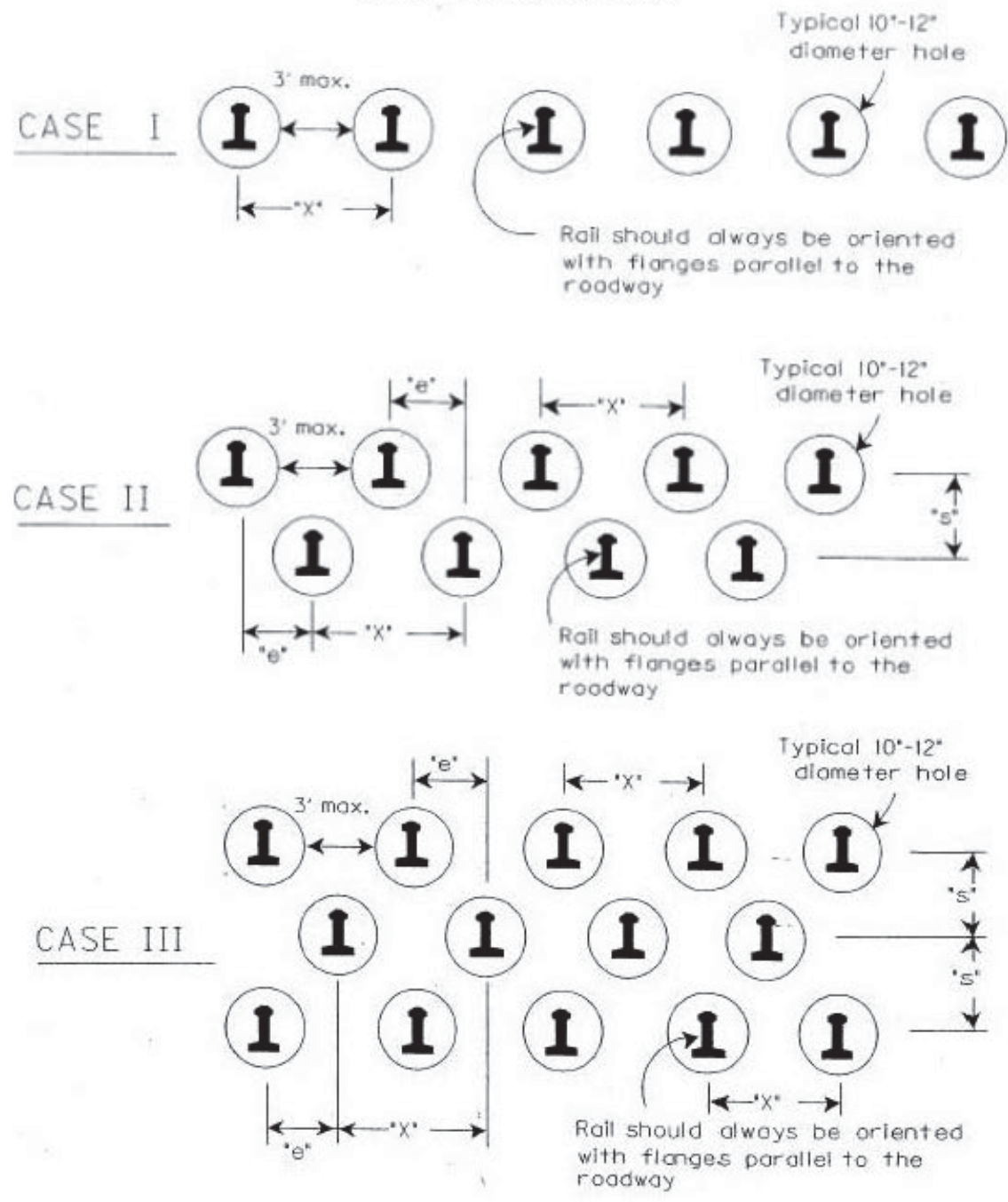


FIGURE 3

**DESIGN CHART FOR 130LBS/YD TO 133 LBS/YD RECYCLED (USED) RAILROAD RAILS
FACTOR OF SAFETY = 1**

Soil Depth to Bedded Rock "H" (Feet)	Minimum Embedment into Bedded Rock "H/2" (Feet)	Total Length of Installed Railroad Rail "Y" (Feet)	Required Number of Rows	Maximum Spacing Between Rails "X" (Max. 48") (Inches)	Effective Spacing Between Rows of Rails "e" (Inches)
8	4	12	1	48	N/A
9	4.5	13.5	1	48	N/A
10	5	15	1	48	N/A
11	5.5	16.5	1	48	N/A
12	6	18	1	48	N/A
13	6.5	19.5	1	48	N/A
14	7	21	1	32	N/A
15	7.5	22.5	2	48	24
16	8	24	2	44	22
17	8.5	25.5	2	36	18
18	9	27	2	28	14
19	9.5	28.5	2	24	12
20	10	30	3	33	11
21	10.5	31.5	3	28.5	9.5
>21	N/A	N/A	N/A	N/A	N/A

- NOTES:**
1. REFER TO FIGURES 1, 2, & 3 FOR DIMENSIONS SHOWN
 2. FOR SOIL DEPTHS "H" GREATER THAN 21 FEET CONTACT THE ENGINEER.

TABLE I

IDENTIFICATION OF RAILROAD RAIL SIZES

1. Typically classified in units of lbs-per-yard.

Examples :

155 lbs/yd, 140 lbs/yd, 132 lbs/yd, 90 lbs/yd

2. Each rail has a classification stamped in web:

Example :

112 25 RE OH ILLINOIS USA 1935 IIIIII



Weight in lbs/yd

GUARDRAIL DELIVERY VERIFICATION SHEET

Contract Id: _____

Contractor: _____

Section Engineer: _____

District & County: _____

<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QTY LEAVING PROJECT</u>	<u>QTY RECEIVED@BB YARD</u>
GUARDRAIL (Includes End treatments & crash cushions)	LF	_____	_____
STEEL POSTS	EACH	_____	_____
STEEL BLOCKS	EACH	_____	_____
WOOD OFFSET BLOCKS	EACH	_____	_____
BACK UP PLATES	EACH	_____	_____
CRASH CUSHION	EACH	_____	_____
NUTS, BOLTS, WASHERS	BAG/BCKT	_____	_____
DAMAGED RAIL TO MAINT. FACILITY	LF	_____	_____
DAMAGED POSTS TO MAINT. FACILITY	EACH	_____	_____

***Required Signatures before Leaving Project Site**

Printed Section Engineer's Representative _____ & Date _____

Signature Section Engineer's Representative _____ & Date _____

Printed Contractor's Representative _____ & Date _____

Signature Contractor's Representative _____ & Date _____

***Required Signatures after Arrival at Bailey Bridge Yard (All material on truck must be counted & the quantity received column completed before signatures)**

Printed Bailey Bridge Yard Representative _____ & Date _____

Signature Bailey Bridge Yard Representative _____ & Date _____

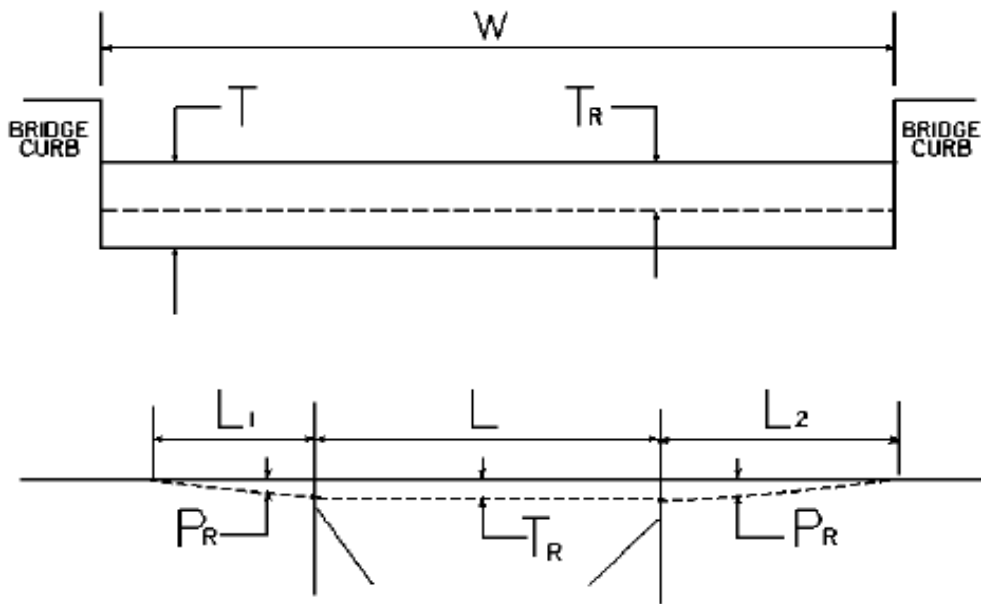
Printed Contractor's Representative _____ & Date _____

Signature Contractor's Representative _____ & Date _____

**Payment for the bid item remove guardrail will be based upon the quantities shown in the Bailey Bridge Yard received column. Payment will not be made for guardrail removal until the guardrail verification sheets are electronically submitted to the Section Engineer by the Bailey Bridge Yard Representative.

Completed Form Submitted to Section Engineer Date: _____ By: _____

BRIDGE DETAIL FOR PAVING PROJECT



W = bridge width curb to curb
 T = thickness of existing asphalt overlay
 L = length of bridge
 L₁ & L₂ = length of approach pavement to be removed
 T_R = thickness to be removed and replaced on bridge
 P_R = thickness to be removed and replaced on pavement
 Note: L₁ & L₂ lengths shall be determined by using a transition rate of 100 ft/in of thickness

Route	Bridge No.	MP	W (ft)	T (in)	L ₁ (ft)	L ₂ (ft)	T _R (in)	L (ft)	P _R (in)
US 60	B000078N	14.555	28.000	0.000	100.000	100.000	0.000	90.000	1.000
US 60	B000006N	14.918	65.000	0.000	100.000	100.000	0.000	105.000	1.000
US 60	B000090N	15.222	60.000	0.000	100.000	100.000	0.000	124.000	1.000

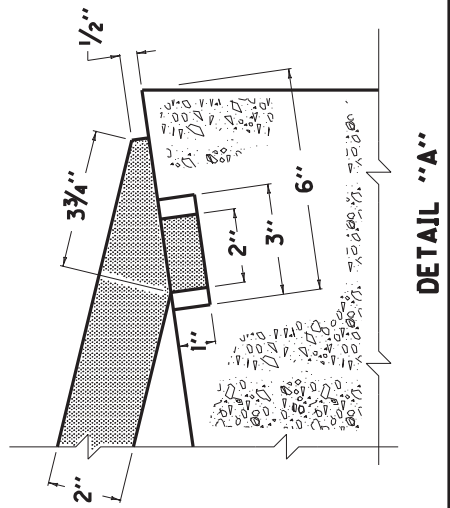
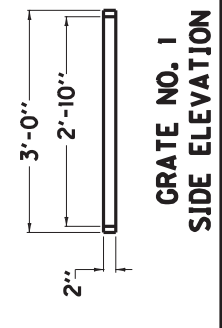
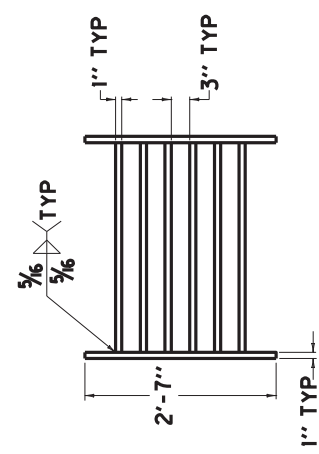
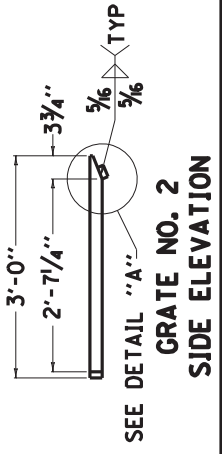
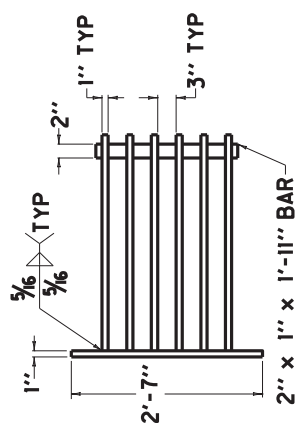
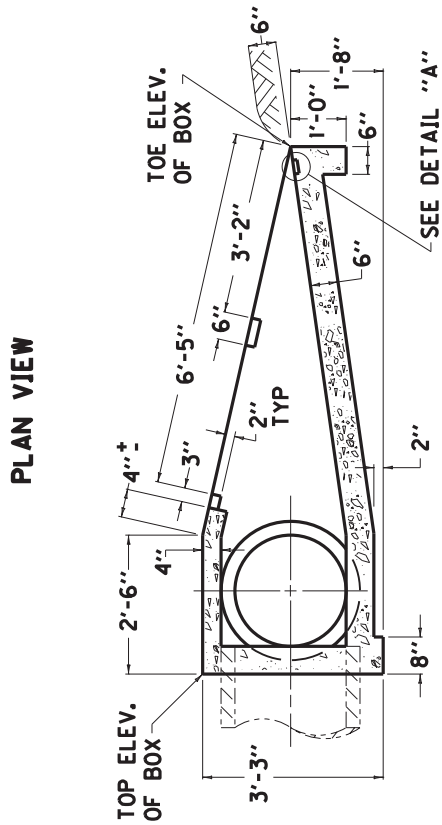
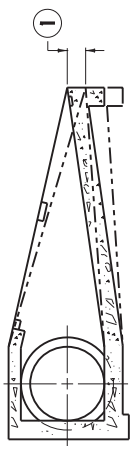
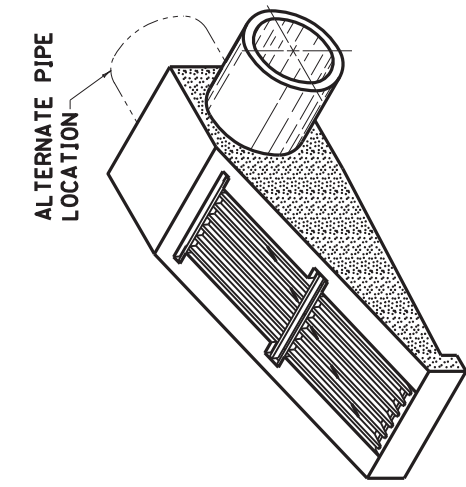
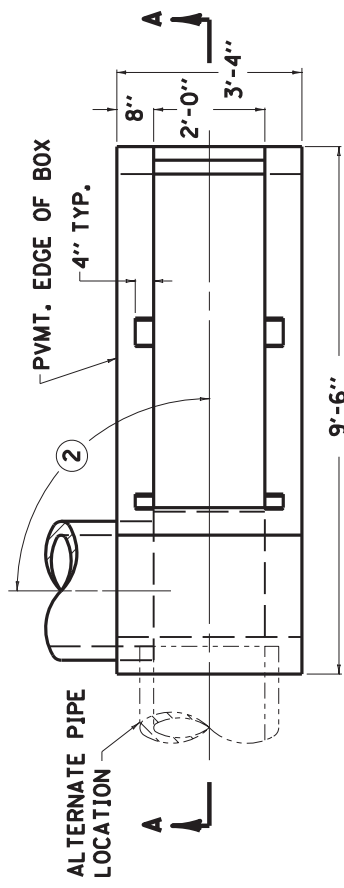
01/01/2009

COUNTY OF	ITEM NO.	SHEET

NOTES

- ITEM CODE BID ITEM UNIT
- 1726 SAFETY BOX INLET-18 INCH SDB-1 EACH
- 1727 SAFETY BOX INLET-24 INCH SDB-1 EACH
- THE UNIT BID FOR EACH STRUCTURE SHALL INCLUDE ALL CONCRETE, STRUCTURAL STEEL GRATING, EXCAVATION, LABOR AND INCIDENTALS NECESSARY FOR ITS CONSTRUCTION AS DETAILED ON THIS SHEET.
- ① TOE OF BOX SHALL BE RAISED OR LOWERED TO FIT EXISTING FIELD CONDITIONS.
- ② SKEW OF BOX SHALL VARY TO FIT EXISTING FIELD CONDITIONS.

APPROXIMATE QUANTITIES			
CLASS "A"	GRATE	LBS. STRUCTURAL STEEL	TOTAL POUNDS
CUBIC YARDS	NUMBER	EACH GRATE	
1.44	1	145	298
	2	153	



KENTUCKY
 DEPARTMENT OF HIGHWAYS

SAFETY TYPE
 BOX INLET
 (18" OR 24")

Contract No. 204117
 Page 07 of 248

APPROVED _____
 PROJECT ENGINEER

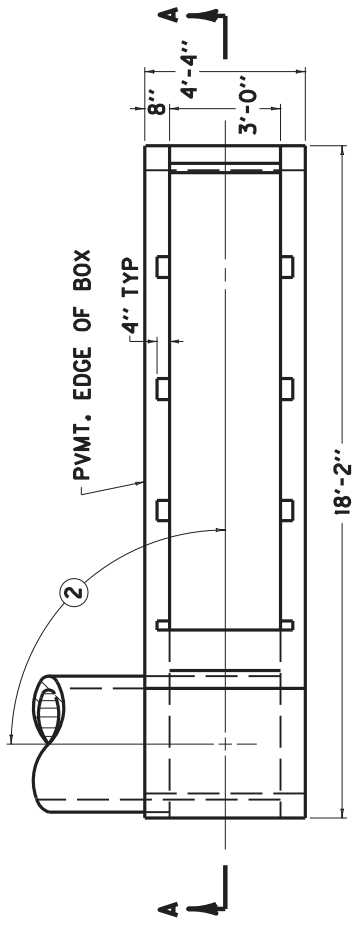
06-04-2008

COUNTY OF	ITEM NO.	SHEET

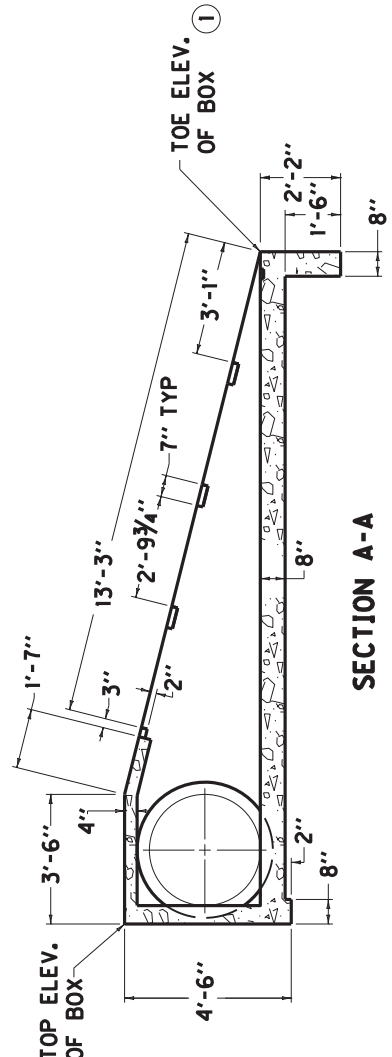
NOTES

- ITEM CODE BID ITEM UNIT
- 23044NS710 SAFETY BOX INLET-36 INCH SDB-1 EACH
- THE UNIT BID FOR EACH STRUCTURE SHALL INCLUDE ALL CONCRETE, STRUCTURAL STEEL GRATING, EXCAVATION, LABOR AND INCIDENTALS NECESSARY FOR ITS CONSTRUCTION AS DETAILED ON THIS SHEET.
- TOE OF BOX SHALL BE RAISED OR LOWERED TO FIT EXISTING FIELD CONDITIONS.
 - SKEW OF BOX SHALL VARY TO FIT EXISTING FIELD CONDITIONS.
 - ALL QUANTITIES ARE FOR ONE HEADWALL.

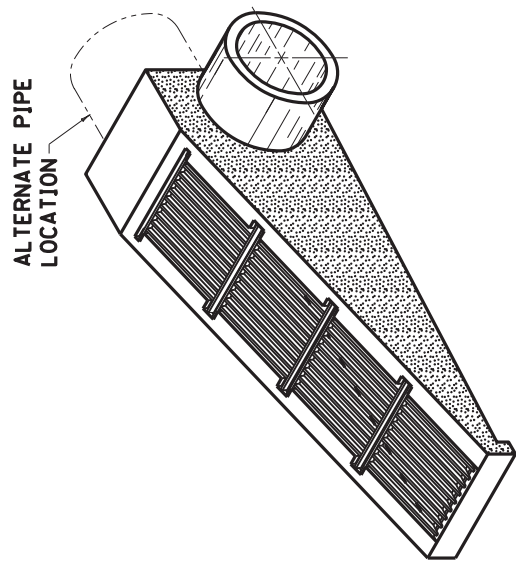
APPROXIMATE QUANTITIES					
CLASS "A" CONC.	CUBIC YARDS	GRATE NUMBER	NO. OF GRATES REQ'D.	LBS.	
				STRUCTURAL STEEL	REINF. STEEL
1	4.51	1	3	222	896
2		2	1	230	261



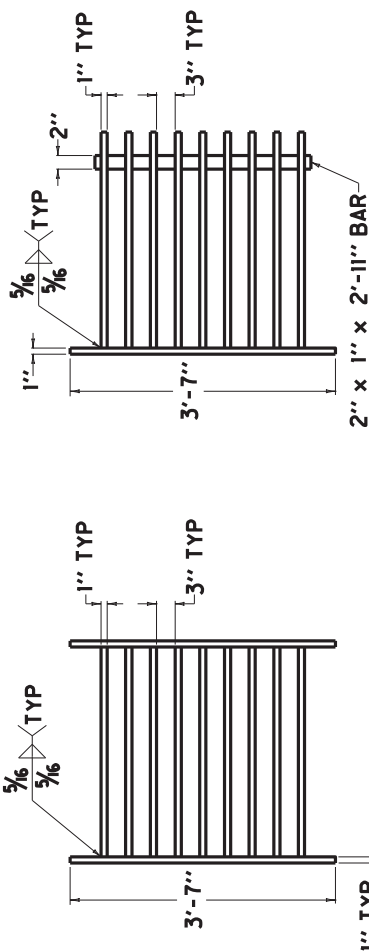
PLAN VIEW



SECTION A-A



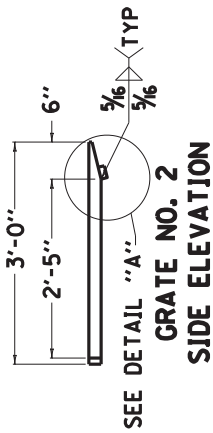
ISOMETRIC VIEW



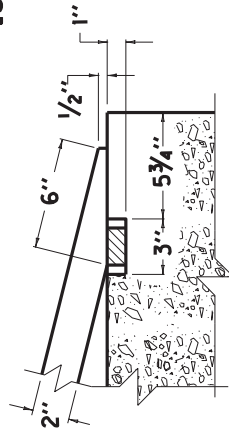
**GRATE NO. 1
 PLAN VIEW**

**GRATE NO. 1
 SIDE ELEVATION**

**GRATE NO. 2
 PLAN VIEW**



**GRATE NO. 2
 SIDE ELEVATION**



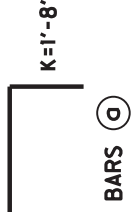
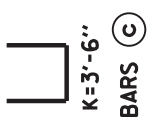
DETAIL "A"

COUNTY OF	ITEM NO.	SHEET NO.

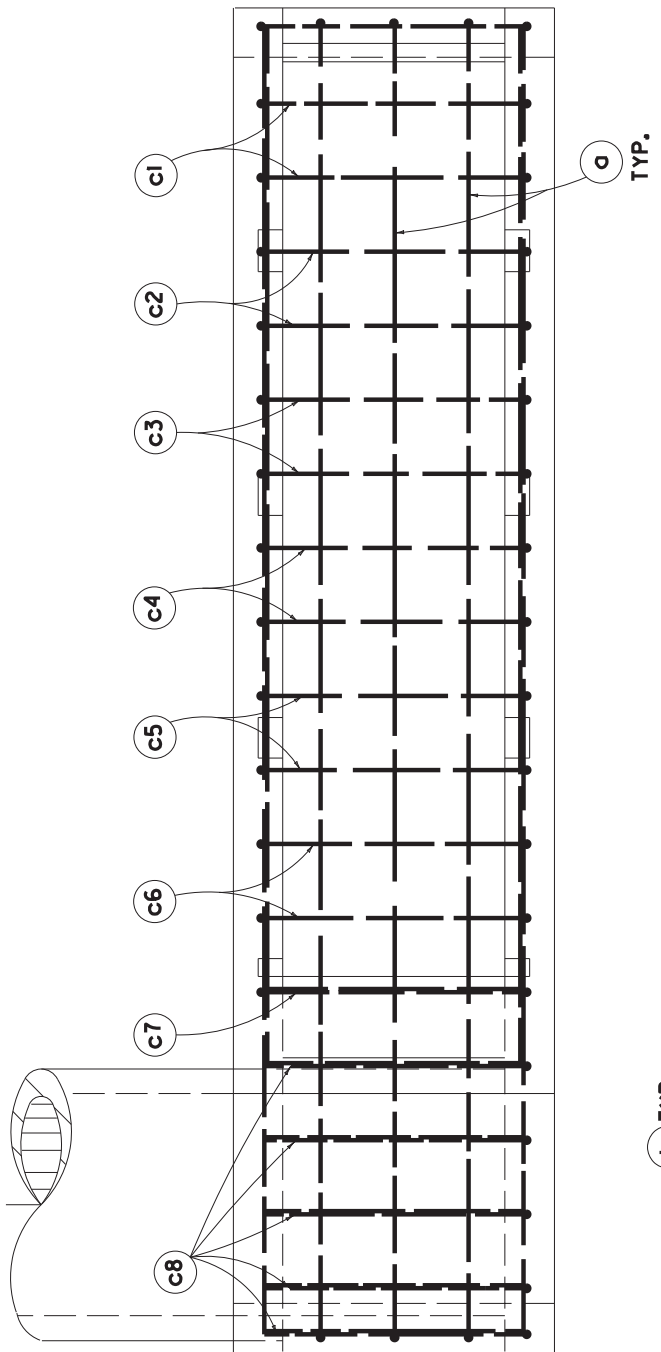
NOTES

1. NUMBER OF BARS IN ONE HEADWALL.
2. DIMENSIONS ARE O. TO O. OF BARS.
3. ALL BARS ARE STRAIGHT EXCEPT THOSE SHOWN BELOW.

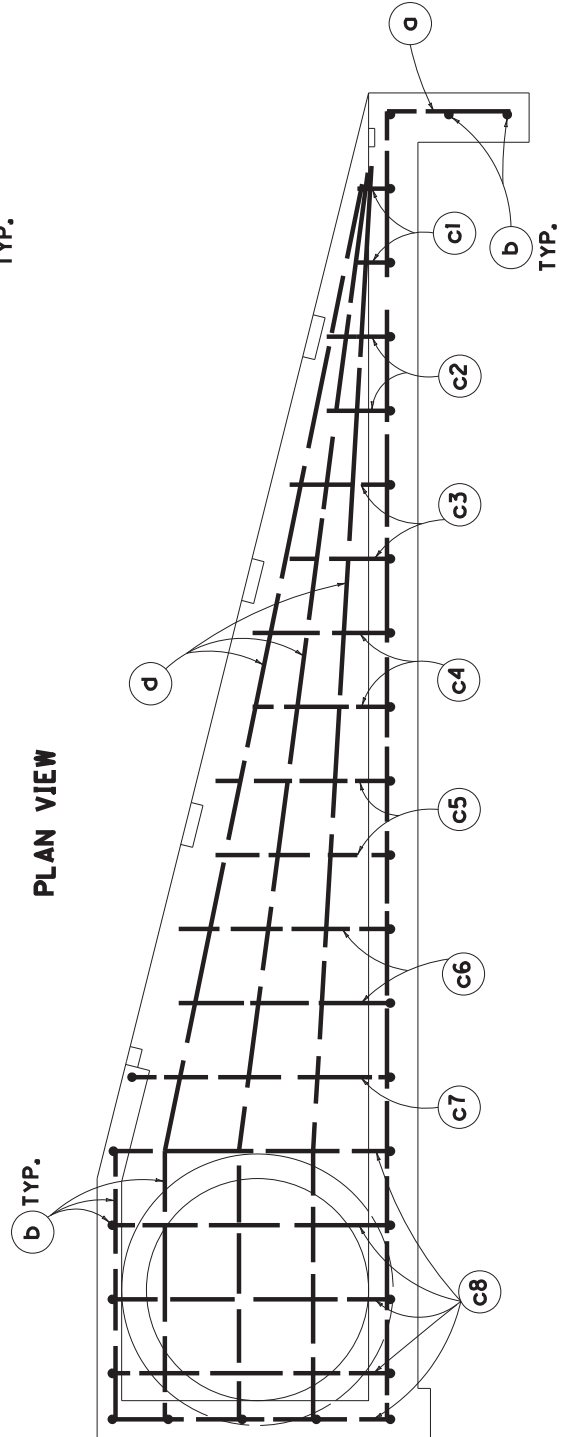
BENT BAR SHAPES



MARK	S	NO	LGTH	K	
				FT	IN
36"					
a	4	5	19	6	1 8
b	4	16	3	6	
c1	4	2	5	0	3 6
c2	4	2	5	10	3 6
c3	4	2	6	10	3 6
c4	4	2	7	10	3 6
c5	4	2	8	10	3 6
c6	4	2	9	10	3 6
c7	4	1	11	0	3 6
c8	4	5	11	6	3 6
d	4	6	13	4	



PLAN VIEW



ELEVATION VIEW

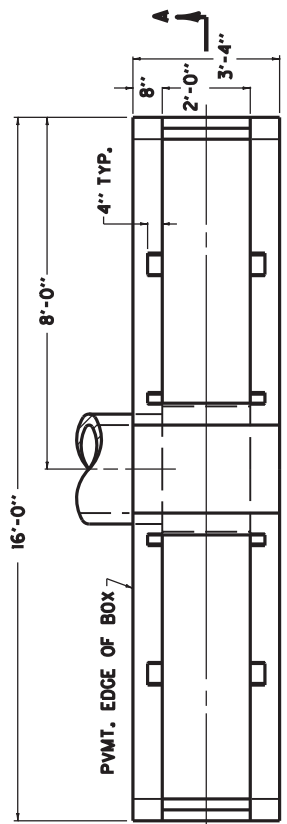
COUNTY OF	ITEM NO.	SHEET NO.
		18

NOTES

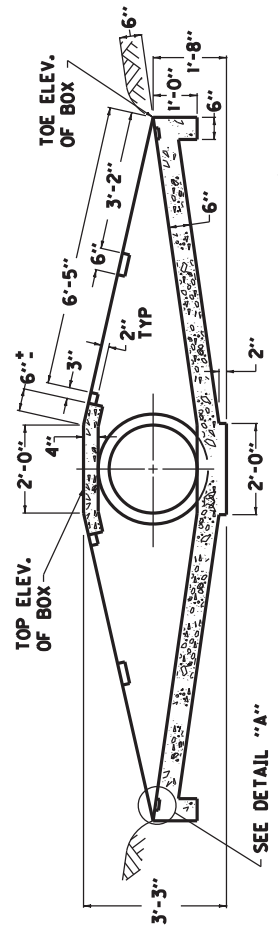
ITEM CODE BID ITEM UNIT
 1728 SAFETY BOX INLET-18 IN DBL SOB-5 EACH
 1729 SAFETY BOX INLET-24 IN DBL SOB-5 EACH

THE UNIT FOR EACH STRUCTURE SHALL INCLUDE ALL CONCRETE, STRUCTURAL STEEL GRATING, EXCAVATION, LABOR AND INCIDENTALS NECESSARY FOR ITS CONSTRUCTION AS DETAILED ON THIS SHEET.

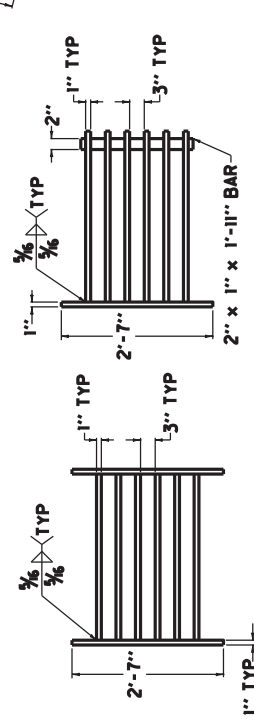
① TOE OF BOX SHALL BE RAISED OR LOWERED TO FIT EXISTING FIELD CONDITIONS.
 ② ANGLE BETWEEN BOX WALLS MAY VARY TO FIT EXISTING FIELD CONDITIONS.



PLAN VIEW

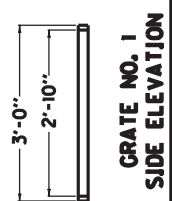


SECTION A-A

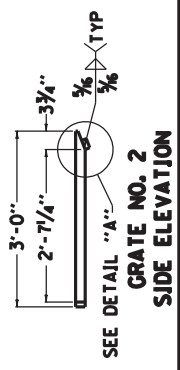


**GRATE NO. 1
PLAN VIEW**

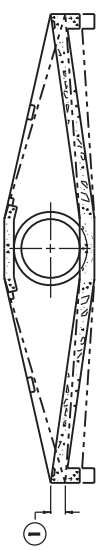
**GRATE NO. 2
PLAN VIEW**



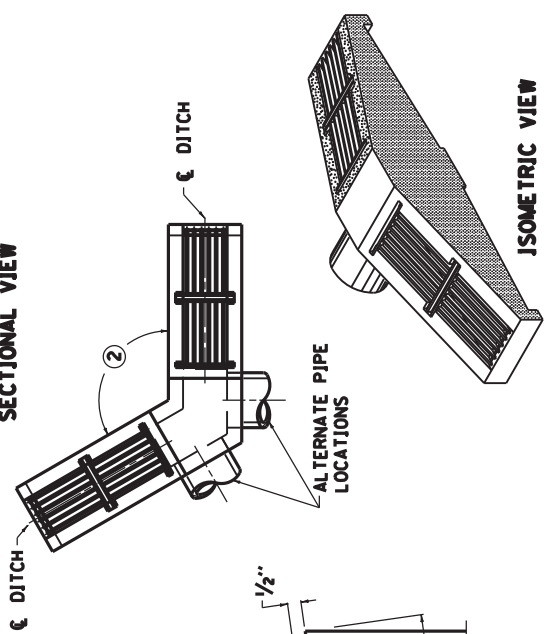
**GRATE NO. 1
SIDE ELEVATION**



**GRATE NO. 2
SIDE ELEVATION**



SECTIONAL VIEW



ISOMETRIC VIEW

APPROXIMATE QUANTITIES			
CLASS	GRATE	LBS. STRUCTURAL STEEL	TOTAL POUNDS
"A"	NUMBER	EACH GRATE	
2.07	1	145	297
	2	153	306
			596

N/A

DBL SAFETY BOX INLET DETAIL SHEET

PART II
SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

Any reference in the plans or proposal to previous editions of the *Standard Specifications for Road and Bridge Construction* and *Standard Drawings* are superseded by *Standard Specifications for Road and Bridge Construction, Edition of 2019* and *Standard Drawings, Edition of 2020*.

SUPPLEMENTAL SPECIFICATIONS

The contractor shall use the Supplemental Specifications that are effective at the time of letting.
The Supplemental Specifications can be found at the following link:

<http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx>

SPECIAL NOTE FOR BARCODE LABEL ON PERMANENT SIGNS

1.0 DESCRIPTION. Install barcode label on sheeting signs. Section references herein are to the Department’s Standard Specifications for Road and Bridge Construction, current edition.

2.0 MATERIALS. The Department will provide the Contractor with a 2 inch x 1 inch foil barcode label for each permanent sheeting sign. A unique number will be assigned to each barcode label.

The Contractor shall contact the Operations and Pavement Management Branch in the Division of Maintenance at (502) 564-4556 to obtain the barcode labels.

3.0 CONSTRUCTION. Apply foil barcode label in the lower right quadrant of the sign back. Signs where the bottom edge is not parallel to the ground, the lowest corner of the sign shall serve as the location to place the barcode label. The barcode label shall be placed no less than one-inch and no more than three inches from any edge of the sign. The barcode must be placed so that the sign post does not cover the barcode label.

Barcodes shall be applied in an indoor setting with a minimum air temperature of 50°F or higher. Prior to application of the barcode label, the back of the sign must be clean and free of dust, oil, etc. If the sign is not clean, an alcohol swab shall be used to clean the area. The area must be allowed to dry prior to placement of the barcode label.

Data for each sign shall include the barcode number, MUTCD reference number, sheeting manufacturer, sheeting type, manufacture date, color of primary reflective surface, installation date, latitude and longitude using the North American Datum of 1983 (NAD83) or the State Plane Coordinates using an x and y ordinate of the installed location.

Data should be provided electronically on the TC 71-229 Sign Details Information and TC 71-230 Sign Assembly Information forms. The Contractor may choose to present the data in a different format provided that the information submitted to the Department is equivalent to the information required on the Department TC forms. The forms must be submitted in electronic format regardless of which type of form is used. The Department will not accept PDF or handwritten forms. These completed forms must be submitted to the Department prior to final inspection of the signs. The Department will not issue formal acceptance for the project until the TC 71-229 and TC-230 electronic forms are completed for all signs and sign assemblies on the project.

4.0 MEASUREMENT. The Department will measure all work required for the installation of the barcode label and all work associated with completion and submission of the sign inventory data (TC 71-229 and TC 71-230).

The installation of the permanent sign will be measured in accordance to Section 715.

5.0 PAYMENT. The Department will make payment for the completed and accepted quantities under the following:

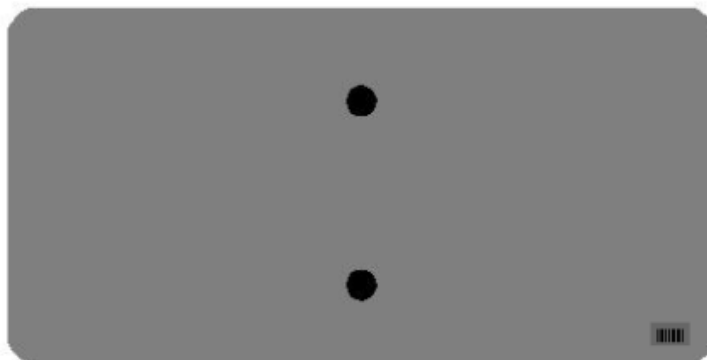
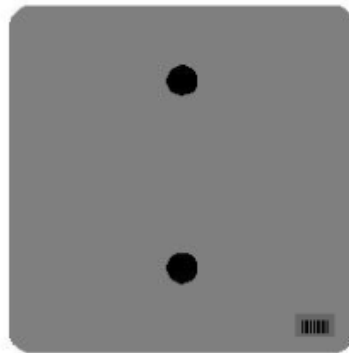
<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24631EC	Barcode Sign Inventory	Each

The Department will not make payment for this item until all barcodes are installed and sign inventory is complete on every permanent sign installed on the project. The Department will make payment for installation of the permanent sign in accordance to Section 715. The Department will consider payment as full compensation for all work required under this special note.

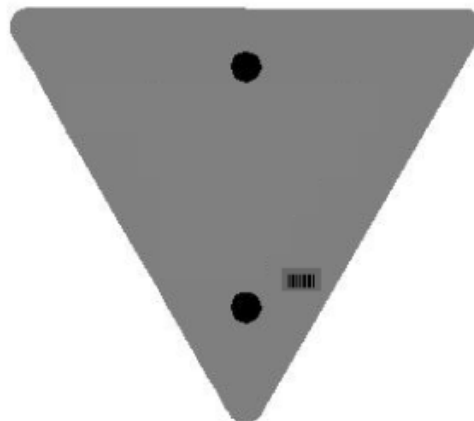
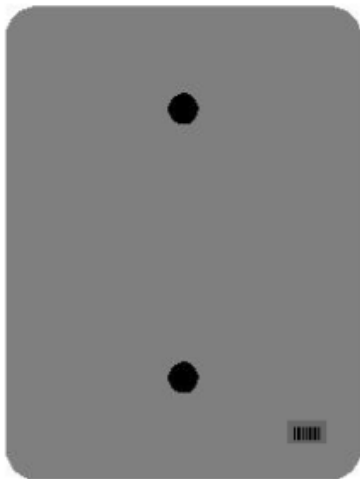
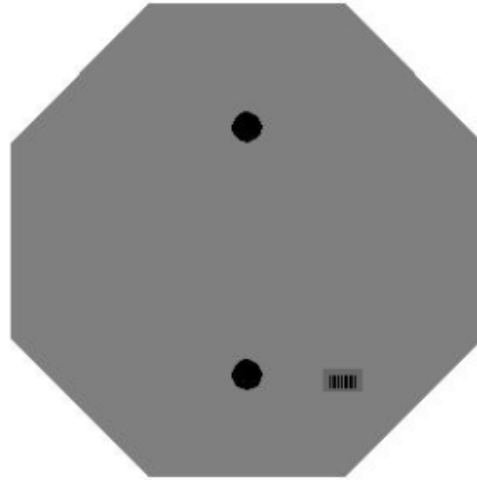
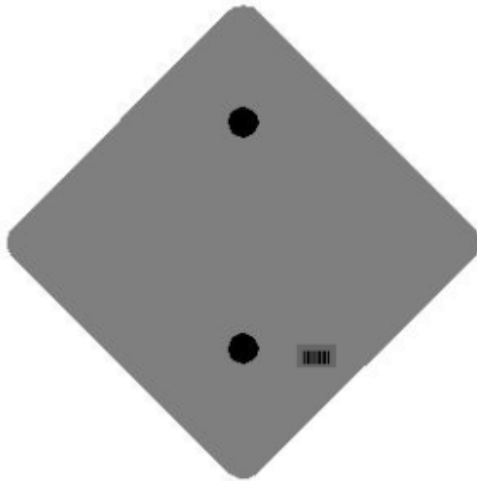
One Sign Post



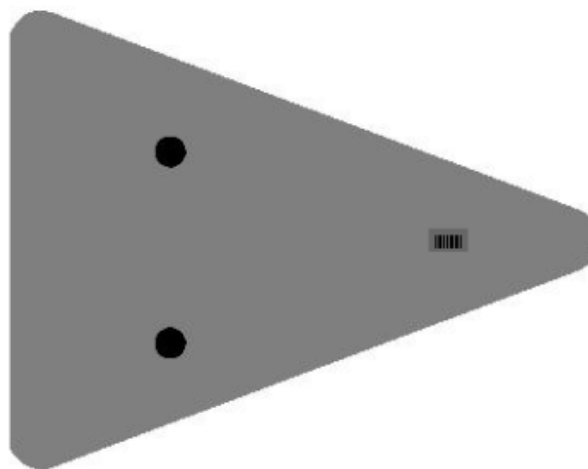
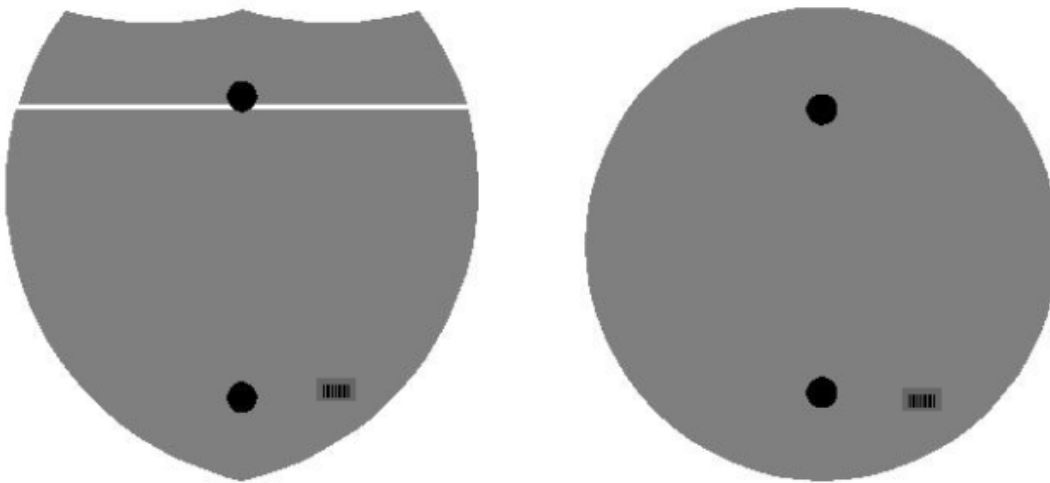
↑
2" Wide Post



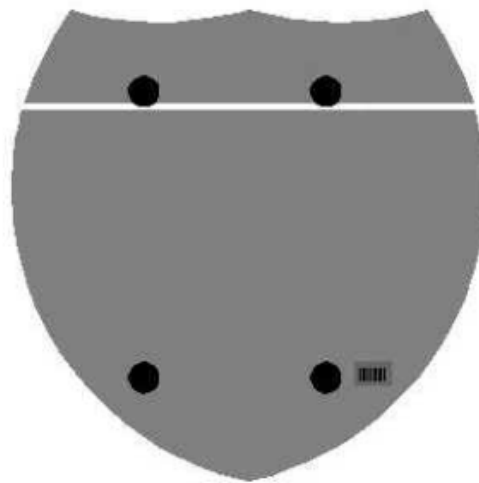
One Sign Post



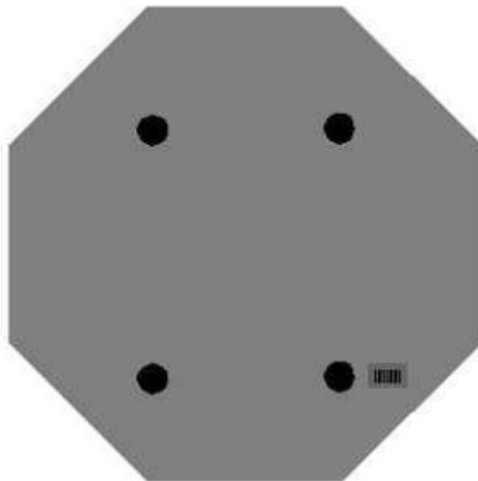
One Sign Post



Double Sign Post



Interstate
Shield

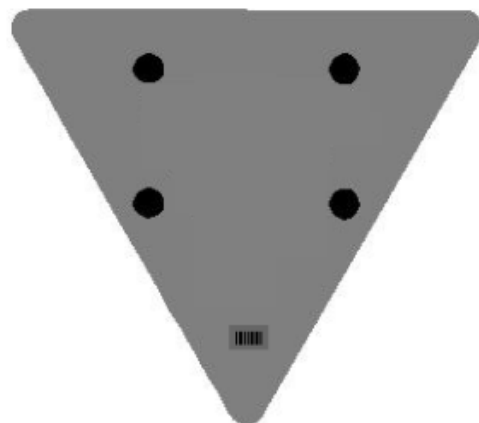


48" Stop

2 Post Signs



↑
2" Wide Post



2020 STANDARD DRAWINGS THAT APPLY

**ROADWAY
~ BARRIERS ~**

TYPICAL BARRIER INSTALLATIONS

TYPICAL GUARDRAIL INSTALLATIONS	RBI-001-12
TYPICAL GUARDRAIL INSTALLATIONS	RBI-002-07
TYPICAL INSTALLATION FOR GUARDRAIL END TREATMENT TYPE 2A	RBI-003-09
INSTALLATION OF GUARDRAIL END TREATMENT TYPE 1	RBI-004-06

GUARDRAIL HARDWARE

STEEL BEAM GUARDRAIL (W-BEAM)	RBR-001-13
GUARDRAIL COMPONENTS	RBR-005-11
GUARDRAIL TERMINAL SECTIONS	RBR-010-06
STEEL GUARDRAIL POSTS	RBR-015-06
GUARDRAIL SYSTEM TRANSITION	RBR-018
GUARDRAIL END TREATMENT TYPE 1	RBR-020-07
GUARDRAIL END TREATMENT TYPE 2A	RBR-025-06
GUARDRAIL END TREATMENT TYPE 3	RBR-030-05
GUARDRAIL END TREATMENT TYPE 3 PIPE DRAINAGE DETAIL	RBR-031-01
GUARDRAIL END TREATMENT TYPE 3 ALTERNATE ANCHOR	RBR-032
GUARDRAIL END TREATMENT TYPE 4A	RBR-035-12
DELINEATORS FOR GUARDRAIL	RBR-005-01
STEEL BEAM GUARDRAIL (THRIE BEAM)	RBR-100-07

~ DRAINAGE ~

BOX INLETS AND OUTLETS

SLOPED BOXES

METAL END SECTION TYPE 1 & 2 (PARALLEL STRUCTURES)	RDB-150-02
METAL END SECTION TYPE 3 & 4 (CROSS STRUCTURES)	RDB-155-02
DIMENSIONS FOR METAL END SECTIONS	RDB-160-02

PIPE AND BOX CULVERT HEADWALLS

CONCRETE HEADWALLS FOR 12"-27" CIRCULAR PIPE CULVERTS	RDH-005-02
SLOPED & FLARED HEWADWALLS FOR 12" TO 27" PIPE	RDH-020-03
PIPE CULVERT HEADWALLS 0 SKEW	RDH-110-02
DIMENSIONS & QUANTITIES 30" – 108" HEADWALLS CIRCULAR PIPE 0 SKEW	RDH-210-03
DIMENSIONS & QUANTITIES 30" – 72" HEADWALLS NON-CIRCULAR PIPE 0 SKEW	RDH-220-02
BILL OF REINFORCEMENT 30" TO 90" DIAMETER CIRCULAR PIPE HEADWALLS 0 SKEW	RDH-310-04
BILL OF REINFORCEMENT 30" TO 72" DIAMETER NON-CIRCULAR PIPE HEADWALLS 0 SKEW	RDH-350-03
PRECAST BOX CULVERT H-WALLS-15 -30 & 45 SK	RDH-1010-02
DIMENSIONS 10'X5' – 11'X11' HEADWALLS PRECSAST BOX CULVERT 30 SKEW	RDH-1150-02
QUANTITIES 3'X2' – 12'X12' H-WALLS PRECAST BOX CULVERTS 30 SKEW	RDH-1210-02
BILL OF REINFORCEMENT 10'X5' – 10'X8' HEADWALLS PRECAST BOX CULVERTS 30 SKEW	RDH-1338-03

Standard Drawings That Apply
Page 2 of 3

TYPICAL DRAINAGE INSTALLATIONS

CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS (12" – 24" PIPE)	RDI-001-10
CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS (27" – 42" PIPE)	RDI-002-05
CULVERT & STORM SEWER PIPE TYPES & COVER HEIGHTS (48" – 54" PIPE).....	RDI-003-05
CULVERT & STORM SEWER PIPE TYPES & COVER HEIGHTS (60" – 66" PIPE).....	RDI-004-04
CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS (NON-CIRCULAR, 15" – 60" PIPE)	RDI-011-03
PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER PIPE	RDI-020-10
PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER, REINFORCED CONC. PIPE	RDI-021-01
PIPE BEDDING, TRENCH CONDITION	RDI-025-06
PIPE BEDDING, TRENCH CONDITION, REINFORCED CONC. PIPE	RDI-026-01
EROSION CONTROL BLANKET SLOPE INSTALLATION.....	RDI-040-01
EROSION CONTROL BLANKET CHANNEL INSTALLATION	RDI-041-01
TYPICAL MEDIAN DRAIN INSTALLATIONS.....	RDI-045-02
FILL HEIGHTS FOR PRECAST REINFORCED CONCRETE BOX CULVERTS.....	RDI-100-05
BEDDING FOR PRECAST BOX CULVERTS, SEWERS, STORM DRAINS, AND THEIR COMBINATIONS.....	RDI-120-04

MISCELLANEOUS DRAINAGE

JUNCTION BOX	RDX-001-06
JUNCTION BOX (DIMENSIONS AND QUANTITIES).....	RDX-002-04
INTERMEDIATE AND END ANCHORS FOR CIRCULAR PIPE	RDX-060-04
INTERMEDIATE AND END ANCHORS FOR NON-CIRCULAR PIPE	RDX-065-04
TEMPORARY SILT FENCE.....	RDX-210-03
SILT TRAP - TYPE A	RDX-220-05
SILT TRAP - TYPE B.....	RDX-225-01
SILT TRAP - TYPE C.....	RDX-230-01
PRECAST BOX CULVERT EXTENSION.....	RDX-300-04

~ GENERAL ~

CURVE WIDENING AND SUPERELEVATION

CURVE WIDENING AND SUPERELEVATION TRANSITIONS.....	RGS-001-07
SUPERELEVATION FOR MULTILANE PAVEMENTS.....	RGS-002-06

MISCELLANEOUS STANDARDS

MISCELLANEOUS STANDARDS	RGX-001-06
TYPICAL EMBANKMENT FOUNDATION BENCHES.....	RGX-010-04
GABION RETAINING WALLS	RGX-050-02

~ PAVEMENT ~

MEDIANS, CURBS, APPROACHES, ENTRANCES, ETC.

APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT	RPM-110-07
SIDEWALK RAMPS	RPM-170-09
SIDEWALK RAMP WITH HANDRAIL	RPM-172-07

Standard Drawings That Apply
Page 3 of 3

TRAFFIC
~ PERMANENT ~
MARKERS

PAVEMENT STRIPING DETAILS FOR TWO LANE TWO WAY ROADWAYS	TPM-175
TYPICAL MARKINGS FOR GORE AREAS.....	TPM-204
TYPICAL MARKINGS FOR ISLANDS AND MEDIANS	TPM-205
TYPICAL MARKINGS FOR TURN LANES PAGE 1.....	TPM-206
TYPICAL MARKINGS FOR TURN LANES PAGE 2.....	TPM-207

RUMBLE STRIPS

SHOULDER & EDGELINE RUMBLE STRIPS PLACEMENT DETAILS	TPR-115
EDGELINE RUMBLE STRIP DETAILS TWO LANE ROADWAYS	TPR-120
SHOULDER RUMBLE STRIP DETAILS TWO LANE ROADWAYS.....	TPR-125

~ TEMPORARY ~
TRAFFIC CONTROL

LANE CLOSURE TWO-LANE HIGHWAY	TTC-100-05
DOUBLE LANE CLOSURE	TTC-125-04
SHOULDER CLOSURE.....	TTC-135-03
ROAD CLOSURE WITH DIVERSION	TTC-150-04

DEVICES

DOUBLE FINES ZONE SIGNS	TTD-120-03
PAVEMENT CONDITION WARNING SIGNS.....	TTD-125-03

STRIPING OPERATIONS

MOBILE OPERATION FOR PAINT STRIPING CASE I.....	TTS-100-02
MOBILE OPERATION FOR PAINT STRIPING CASE II	TTS-105-02
MOBILE OPERATION FOR DURABLE STRIPING CASE I.....	TTS-120-02
MOBILE OPERATION FOR DURABLE STRIPING CASE II	TTS-125-02

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

FHWA-1273 -- Revised May 1, 2012

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (ii) The classification is utilized in the area by the construction industry; and
- (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

**KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS**

**EMPLOYMENT REQUIREMENTS
RELATING TO
NONDISCRIMINATION OF EMPLOYEES
(APPLICABLE TO FEDERAL-AID SYSTEM CONTRACTS)**

**AN ACT OF THE KENTUCKY GENERAL ASSEMBLY
TO PREVENT DISCRIMINATION IN EMPLOYMENT**

**KRS CHAPTER 344
EFFECTIVE JUNE 16, 1972**

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (forty and above); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age forty (40) and over. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, except that such a notice or advertisement may indicate a preference, limitation, or specification based on religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, when religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, is a bona fide occupational qualification for employment.

3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age forty (40) and over, in admission to, or employment in any program established to provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

Revised: January 25, 2017

Standard Title VI/Non-Discrimination Assurances

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, **Federal Highway Administration**, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor’s obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the **Federal Highway Administration** to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the **Federal Highway Administration**, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor’s noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the **Federal Highway Administration** may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the **Federal Highway Administration** may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

Standard Title VI/Non-Discrimination Statutes and Authorities

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 -- 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 *et seq.*)

EXECUTIVE BRANCH CODE OF ETHICS

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (7) provides:

No present or former public servant shall, within six (6) months following termination of his office or employment, accept employment, compensation, or other economic benefit from any person or business that contracts or does business with, or is regulated by, the state in matters in which he was directly involved during the last thirty-six (36) months of his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, or for which he received, prior to his state employment, a professional degree or license, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his tenure in state government. This subsection shall not prohibit the performance of ministerial functions, including but not limited to filing tax returns, filing applications for permits or licenses, or filing incorporation papers, nor shall it prohibit the former officer or public servant from receiving public funds disbursed through entitlement programs.

KRS 11A.040 (9) states:

A former public servant shall not represent a person or business before a state agency in a matter in which the former public servant was directly involved during the last thirty-six (36) months of his tenure, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 3 Fountain Place, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: January 27, 2017

"General Decision Number: KY20200038 08/28/2020

Superseded General Decision Number: KY20190038

State: Kentucky

Construction Type: Highway

Counties: Anderson, Bath, Bourbon, Boyd, Boyle, Bracken, Breckinridge, Bullitt, Carroll, Carter, Clark, Elliott, Fayette, Fleming, Franklin, Gallatin, Grant, Grayson, Greenup, Hardin, Harrison, Henry, Jefferson, Jessamine, Larue, Lewis, Madison, Marion, Mason, Meade, Mercer, Montgomery, Nelson, Nicholas, Oldham, Owen, Robertson, Rowan, Scott, Shelby, Spencer, Trimble, Washington and Woodford Counties in Kentucky.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/03/2020
1	08/14/2020
2	08/28/2020

BRIN0004-003 06/01/2017

BRECKENRIDGE COUNTY

	Rates	Fringes
BRICKLAYER.....	\$ 26.80	12.38

BRKY0001-005 06/01/2017

BULLITT, CARROLL, GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE,
MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, & TRIMBLE
COUNTIES:

	Rates	Fringes
BRICKLAYER.....	\$ 26.80	12.38

BRKY0002-006 06/01/2017		

BRACKEN, GALLATIN, GRANT, MASON & ROBERTSON COUNTIES:

	Rates	Fringes
BRICKLAYER.....	\$ 27.81	13.01

BRKY0007-004 06/01/2017		

BOYD, CARTER, ELLIOT, FLEMING, GREENUP, LEWIS & ROWAN COUNTIES:

	Rates	Fringes
BRICKLAYER.....	\$ 32.98	19.02

BRKY0017-004 06/01/2017		

ANDERSON, BATH, BOURBON, BOYLE, CLARK, FAYETTE, FRANKLIN,
HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS,
OWEN, SCOTT, WASHINGTON & WOODFORD COUNTIES:

	Rates	Fringes
BRICKLAYER.....	\$ 26.47	12.76

CARP0064-001 05/01/2015		

	Rates	Fringes
CARPENTER.....	\$ 27.50	16.06
Diver.....	\$ 41.63	16.06
PILEDRIVERMAN.....	\$ 27.75	16.06

ELEC0212-008 06/03/2019		

BRACKEN, GALLATIN and GRANT COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 30.18	18.89

ELEC0212-014 11/26/2018		

BRACKEN, GALLATIN & GRANT COUNTIES:

	Rates	Fringes
Sound & Communication Technician.....	\$ 24.35	10.99

ELEC0317-012 06/01/2019		

BOYD, CARTER, ELLIOT & ROWAN COUNTIES:

	Rates	Fringes
ELECTRICIAN (Wiremen)		
Electrician.....	\$ 34.35	25.70

ELEC0369-007 05/28/2019		

ANDERSON, BATH, BOURBON, BOYLE, BRECKINRIDGE, BULLITT, CARROLL,
CLARK, FAYETTE, FRAONKLIN, GRAYSON, HARDIN, HARRISON, HENRY,
JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER,
MONTGOMERY, NELSON, NICHOLAS, OLDHAM, OWEN, ROBERTSON, SCOTT,
SHELBY, SPENCER, TRIMBLE, WASHINGTON, & WOODFORD COUNTIES:

	Rates	Fringes
ELECTRICIAN.....	\$ 32.44	17.22

ELEC0575-002 05/27/2019		

FLEMING, GREENUP, LEWIS & MASON COUNTIES:

	Rates	Fringes
ELECTRICIAN.....	\$ 33.75	17.19

* ENGI0181-018 07/01/2020		

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1.....	\$ 33.95	17.25
GROUP 2.....	\$ 31.09	17.25
GROUP 3.....	\$ 31.54	17.25
GROUP 4.....	\$ 30.77	17.25

OPERATING ENGINEER CLASSIFICATIONS

GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller;
Batcher Plant; Bituminous Paver; Bituminous Transfer
Machine; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All
Scoop; Carry Deck Crane; Central Compressor Plant; Cherry
Picker; Clamshell; Concrete Mixer (21 cu. ft. or Over);
Concrete Paver; Truck-Mounted Concrete Pump; Core Drill;
Crane; Crusher Plant; Derrick; Derrick Boat; Ditching &
Trenching Machine; Dragline; Dredge Operator; Dredge
Engineer; Elevating Grader & Loaders; Grade-All; Gurries;
Heavy Equipment Robotics Operator/Mechanic; High Lift;
Hoe-Type Machine; Hoist (Two or More Drums); Hoisting
Engine (Two or More Drums); Horizontal Directional Drill
Operator; Hydrocrane; Hyster; KeCal Loader; LeTourneau;
Locomotive; Mechanic; Mechanically Operated Laser Screed;
Mechanic Welder; Mucking Machine; Motor Scraper; Orangepeel
Bucket; Overhead Crane; Piledriver; Power Blade; Pumpcrete;
Push Dozer; Rock Spreader, attached to equipment; Rotary
Drill; Roller (Bituminous); Rough Terrain Crane; Scarifier;
Scoopmobile; Shovel; Side Boom; Subgrader; Tailboom;
Telescoping Type Forklift; Tow or Push Boat; Tower Crane
(French, German & other types); Tractor Shovel; Truck
Crane; Tunnel Mining Machines, including Moles, Shields or
similar types of Tunnel Mining Equipment

GROUP 2 - Air Compressor (Over 900 cu. ft. per min.);

Bituminous Mixer; Boom Type Tamping Machine; Bull Float;
Concrete Mixer (Under 21 cu. ft.); Dredge Engineer;
Electric Vibrator; Compactor/Self-Propelled Compactor;
Elevator (One Drum or Buck Hoist); Elevator (When used to
Hoist Building Material); Finish Machine; Firemen & Hoist
(One Drum); Flexplane; Forklift (Regardless of Lift
Height); Form Grader; Joint Sealing Machine; Outboard Motor
Boat; Power Sweeper (Riding Type); Roller (Rock); Ross
Carrier; Skid Mounted or Trailer Mounted Concrete Pump; Skid
Steer Machine with all Attachments; Switchman or Brakeman;
Throttle Valve Person; Tractair & Road Widening Trencher;
Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger;
Welding Machine; Well Points; & Whirley Oiler

GROUP 3 - All Off Road Material Handling Equipment,
including Articulating Dump Trucks; Greaser on Grease
Facilities servicing Heavy Equipment

GROUP 4 - Bituminous Distributor; Burlap & Curing Machine;
Cement Gun; Concrete Saw; Conveyor; Deckhand Oiler; Grout
Pump; Hydraulic Post Driver; Hydro Seeder; Mud Jack; Oiler;
Paving Joint Machine; Power Form Handling Equipment; Pump;
Roller (Earth); Steerman; Tamping Machine; Tractor (Under
50 H.P.); & Vibrator

CRANES - with booms 150 ft. & Over (Including JIB), and where
the length of the boom in combination with the length of
the piling leads equals or exceeds 150 ft. - \$1.00 over
Group 1 rate

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID
10%
ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK.

IRON0044-009 06/01/2020

BRACKEN, GALLATIN, GRANT, HARRISON, ROBERTSON,
BOURBON (Northern third, including Townships of Jackson,
Millersburg, Ruddel Mills & Shawhan);
CARROLL (Eastern third, including the Township of Ghent);
FLEMING (Western part, excluding Townships of Beechburg, Colfax,
Elizaville, Flemingsburg, Flemingsburg Junction, Foxport,
Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills,
Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar
Plains, Ringos Mills, Tilton & Wallingford);
MASON (Western two-thirds, including Townships of Dover,
Lewisburg, Mays Lick, Maysville, Minerva, Moranburg,
Murphysville, Ripley, Sardis, Shannon, South Ripley &
Washington);
NICHOLAS (Townships of Barefoot, Barterville, Carlisle,
Ellisville, Headquarters, Henryville, Morningglory, Myers &
Oakland Mills);
OWEN (Townships of Beechwood, Bromley, Fairbanks, Holbrook,
Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New
Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita &
Wheatley);
SCOTT (Northern two-thirds, including Townships of Biddle,
Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford,
Rogers Gap, Sadieville, Skinnersburg & Stonewall)

Rates Fringes

IRONWORKER		
Fence Erector.....	\$ 28.95	21.20
Structural.....	\$ 30.47	21.20

 IRON0070-006 06/01/2020

ANDERSON, BOYLE, BRECKINRIDGE, BULLITT, FAYETTE, FRANKLIN,
 GRAYSON, HARDIN, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON,
 MARION, MEADE, MERCER, NELSON, OLDHAM, SHELBY, SPENCER,
 TRIMBLE, WASHINGTON & WOODFORD
 BOURBON (Southern two-thirds, including Townships of Austerlity,
 Centerville, Clintonville, Elizabeth, Hutchison, Littlerock,
 North Middletown & Paris);
 CARROLL (Western two-thirds, including Townships of Carrollton,
 Easterday, English, Locust, Louis, Prestonville & Worthville);
 CLARK (Western two-thirds, including Townships of Becknerville,
 Flanagan, Ford, Pine Grove, Winchester & Wyandotte);
 OWEN (Eastern eighth, including Townships of Glenmary, Gratz,
 Monterey, Perry Park & Tacketts Mill);
 SCOTT (Southern third, including Townships of Georgetown, Great
 Crossing, Newtown, Stampling Ground & Woodlake);

	Rates	Fringes
IRONWORKER.....	\$ 30.42	23.15

 IRON0769-007 06/01/2020

BATH, BOYD, CARTER, ELLIOTT, GREENUP, LEWIS, MONTGOMERY & ROWAN
 CLARK (Eastern third, including townships of Bloomingdale,
 Hunt, Indian Fields, Kiddville, Loglick, Rightangele & Thomson);
 FLEMING (Townships of Beechburg, Colfax, Elizaville,
 Flemingsburg, Flemingsburg Junction, Foxport, Grange City,
 Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton,
 Pecksville, Plummers Landing, Plummers Mill, Poplar Plains,
 Ringos Mills, Tilton & Wallingford);
 MASON (Eastern third, including Townships of Helena, Marshall,
 Orangeburg, Plumville & Springdale);
 NICHOLAS (Eastern eighth, including the Township of Moorefield
 Sprout)

	Rates	Fringes
IRONWORKER		
ZONE 1.....	\$ 32.75	26.34
ZONE 2.....	\$ 33.15	26.34
ZONE 3.....	\$ 34.75	26.34

ZONE 1 - (no base rate increase) Up to 10 mile radius of
 Union Hall, 1643 Greenup Ave, Ashland, KY.

 ZONE 2 - (add \$0.40 per hour to base rate) 10 to 50 mile
 radius of Union Hall, 1643 Greenup Ave, Ashland, KY.

 ZONE 3 - (add \$2.00 per hour to base rate) 50 mile radius &
 over of Union Hall, 1643 Greenup Ave, Ashland, KY.

 LABO0189-003 07/01/2018

BATH, BOURBON, BOYD, BOYLE, BRACKEN, CARTER, CLARK, ELLIOTT,
 FAYETTE, FLEMING, FRANKLIN, GALLATIN, GRANT, GREENUP, HARRISON,

JESSAMINE, LEWIS, MADISON, MASON, MERCER, MONTGOMERY, NICHOLAS,
OWEN, ROBERTSON, ROWAN, SCOTT, & WOOLFORD COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 23.07	14.21
GROUP 2.....	\$ 23.32	14.21
GROUP 3.....	\$ 23.37	14.21
GROUP 4.....	\$ 23.97	14.21

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushhammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

LABO0189-008 07/01/2018

ANDERSON, BULLITT, CARROLL, HARDIN, HENRY, JEFFERSON, LARUE,
MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE &
WASHINGTON COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 23.07	14.21

GROUP 2.....	\$ 23.32	14.21
GROUP 3.....	\$ 23.37	14.21
GROUP 4.....	\$ 23.97	14.21

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushhammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

 LABO0189-009 07/01/2018

BRECKINRIDGE & GRAYSON COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 23.07	14.21
GROUP 2.....	\$ 23.32	14.21
GROUP 3.....	\$ 23.37	14.21
GROUP 4.....	\$ 23.97	14.21

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson;

Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushhammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

 PAIN0012-005 06/11/2005

BATH, BOURBON, BOYLE, CLARK, FAYETTE, FLEMING, FRANKLIN, HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS, ROBERTSON, SCOTT & WOODFORD COUNTIES:

	Rates	Fringes
PAINTER		
Bridge/Equipment Tender and/or Containment Builder..\$	18.90	5.90
Brush & Roller.....\$	21.30	5.90
Elevated Tanks; Steeplejack Work; Bridge & Lead Abatement.....\$	22.30	5.90
Sandblasting & Waterblasting.....\$	22.05	5.90
Spray.....\$	21.80	5.90

 PAIN0012-017 05/01/2015

BRACKEN, GALLATIN, GRANT, MASON & OWEN COUNTIES:

	Rates	Fringes
PAINTER (Heavy & Highway Bridges - Guardrails - Lightpoles - Striping) Bridge Equipment Tender		

and Containment Builder.....	\$ 20.73	9.06
Brush & Roller.....	\$ 23.39	9.06
Elevated Tanks; Steeplejack Work; Bridge & Lead Abatement.....	\$ 24.39	9.06
Sandblasting & Water Blasting.....	\$ 24.14	9.06
Spray.....	\$ 23.89	9.06

 PAIN0118-004 06/01/2018

ANDERSON, BRECKINRIDGE, BULLITT, CARROLL, GRAYSON, HARDIN,
 HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY,
 SPENCER, TRIMBLE & WASHINGTON COUNTIES:

	Rates	Fringes
PAINTER		
Brush & Roller.....	\$ 22.00	12.52
Spray, Sandblast, Power Tools, Waterblast & Steam Cleaning.....	\$ 23.00	12.52

 PAIN1072-003 12/01/2018

BOYD, CARTER, ELLIOTT, GREENUP, LEWIS and ROWAN COUNTIES

	Rates	Fringes
Painters:		
Bridges; Locks; Dams; Tension Towers & Energized Substations.....	\$ 33.33	18.50
Power Generating Facilities.....	\$ 30.09	18.50

 PLUM0248-003 06/01/2018

BOYD, CARTER, ELLIOTT, GREENUP, LEWIS & ROWAN COUNTIES:

	Rates	Fringes
Plumber and Steamfitter.....	\$ 36.00	20.23

 PLUM0392-007 06/01/2018

BRACKEN, CARROLL (Eastern Half), GALLATIN, GRANT, MASON, OWEN &
 ROBERTSON COUNTIES:

	Rates	Fringes
Plumbers and Pipefitters.....	\$ 32.01	19.67

 PLUM0502-003 08/01/2020

BRECKINRIDGE, BULLITT, CARROLL (Western Half), FRANKLIN
 (Western three-fourths), GRAYSON, HARDIN, HENRY, JEFFERSON,
 LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE &
 WASHINGTON COUNTIES

	Rates	Fringes
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cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

No laborer, workman or mechanic shall be paid at a rate less than that of a Journeyman except those classified as bona fide apprentices.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contractor shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

TO: EMPLOYERS/EMPLOYEES

PREVAILING WAGE SCHEDULE:

The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the number of hours worked in each classification at the prescribed hourly base rate.

OVERTIME:

Overtime is to be paid to an employee at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty (40) hours in such workweek. Wage violations or questions should be directed to the designated Engineer or the undersigned.

Director
Division of Construction Procurement
Frankfort, Kentucky 40622
502-564-3500

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY
(Executive Order 11246)**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

GOALS FOR MINORITY PARTICIPATION IN EACH TRADE	GOALS FOR FEMALE PARTICIPATION IN EACH TRADE
2.5%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4, 3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. The notification shall be mailed to:

**Evelyn Teague, Regional Director
Office of Federal Contract Compliance Programs
61 Forsyth Street, SW, Suite 7B75
Atlanta, Georgia 30303-8609**

4. As used in this Notice, and in the contract resulting from this solicitation, the "**covered area**" is Rowan County.

PART IV
INSURANCE

Refer to
Kentucky Standard Specifications for Road and Bridge Construction,
current edition

PART V
BID ITEMS

PROPOSAL BID ITEMS

204117

Page 1 of 3

Report Date 8/28/20

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	401.00	TON		\$	
0020	00100		ASPHALT SEAL AGGREGATE	43.40	TON		\$	
0030	00103		ASPHALT SEAL COAT	5.30	TON		\$	
0040	00190		LEVELING & WEDGING PG64-22	793.00	TON		\$	
0050	00212		CL2 ASPH BASE 1.00D PG64-22	448.00	TON		\$	
0060	00301		CL2 ASPH SURF 0.38D PG64-22	3,694.00	TON		\$	
0070	00356		ASPHALT MATERIAL FOR TACK	34.40	TON		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0080	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE (SPECIAL)	228.00	EACH		\$	
0090	02014		BARRICADE-TYPE III	4.00	EACH		\$	
0100	02159		TEMP DITCH	16,574.00	LF		\$	
0110	02160		CLEAN TEMP DITCH	8,287.00	LF		\$	
0120	02351		GUARDRAIL-STEEL W BEAM-S FACE	10,787.50	LF		\$	
0130	02355		GUARDRAIL-STEEL W BEAM-S FACE A	100.00	LF		\$	
0140	02360		GUARDRAIL TERMINAL SECTION NO 1	27.00	EACH		\$	
0150	02363		GUARDRAIL CONNECTOR TO BRIDGE END TY A	4.00	EACH		\$	
0160	02367		GUARDRAIL END TREATMENT TYPE 1	13.00	EACH		\$	
0170	02369		GUARDRAIL END TREATMENT TYPE 2A	1.00	EACH		\$	
0180	02373		GUARDRAIL END TREATMENT TYPE 3	2.00	EACH		\$	
0190	02381		REMOVE GUARDRAIL	11,437.50	LF		\$	
0200	02403		REMOVE CONCRETE MASONRY	7.00	CUYD		\$	
0210	02562		TEMPORARY SIGNS	603.70	SQFT		\$	
0220	02575		DITCHING AND SHOULDERING	16,069.00	LF		\$	
0230	02650		MAINTAIN & CONTROL TRAFFIC (US 60)	1.00	LS		\$	
0240	02671		PORTABLE CHANGEABLE MESSAGE SIGN	6.00	EACH		\$	
0250	02676		MOBILIZATION FOR MILL & TEXT (US 60)	1.00	LS		\$	
0260	02677		ASPHALT PAVE MILLING & TEXTURING	279.00	TON		\$	
0270	02697		EDGE LINE RUMBLE STRIPS	28,200.00	LF		\$	
0280	02701		TEMP SILT FENCE	16,574.00	LF		\$	
0290	02703		SILT TRAP TYPE A	12.00	EACH		\$	
0300	02704		SILT TRAP TYPE B	12.00	EACH		\$	
0310	02705		SILT TRAP TYPE C	12.00	EACH		\$	
0320	02706		CLEAN SILT TRAP TYPE A	12.00	EACH		\$	
0330	02707		CLEAN SILT TRAP TYPE B	12.00	EACH		\$	
0340	02708		CLEAN SILT TRAP TYPE C	12.00	EACH		\$	
0350	02726		STAKING (US 60)	1.00	LS		\$	
0360	03234		RAILROAD RAILS-DRILLED	636.00	LF		\$	
0370	03235		EXCAVATION AND BACKFILL	571.00	CUYD		\$	

PROPOSAL BID ITEMS

Report Date 8/28/20

Page 2 of 3

204117

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0380	03236		CRIBBING	1,793.00	SQFT		\$	
0390	03269		TRIM & REMOVE TREES & BRUSH	590.00	LF		\$	
0400	05950		EROSION CONTROL BLANKET	10,000.00	SQYD		\$	
0410	05952		TEMP MULCH	38,397.00	SQYD		\$	
0420	05953		TEMP SEEDING AND PROTECTION	28,798.00	SQYD		\$	
0430	05963		INITIAL FERTILIZER	1.78	TON		\$	
0440	05964		MAINTENANCE FERTILIZER	3.00	TON		\$	
0450	05985		SEEDING AND PROTECTION	57,596.00	SQYD		\$	
0460	05992		AGRICULTURAL LIMESTONE	36.00	TON		\$	
0470	06406		SBM ALUM SHEET SIGNS .080 IN	616.25	SQFT		\$	
0480	06407		SBM ALUM SHEET SIGNS .125 IN	72.28	SQFT		\$	
0490	06410		STEEL POST TYPE 1	1,239.00	LF		\$	
0500	06510		PAVE STRIPING-TEMP PAINT-4 IN	63,270.00	LF		\$	
0510	06542		PAVE STRIPING-THERMO-6 IN W	27,917.00	LF		\$	
0520	06543		PAVE STRIPING-THERMO-6 IN Y	27,917.00	LF		\$	
0530	06556		PAVE STRIPING-DUR TY 1-6 IN W	222.00	LF		\$	
0540	06557		PAVE STRIPING-DUR TY 1-6 IN Y	222.00	LF		\$	
0550	06569		PAVE MARKING-THERMO CROSS-HATCH	475.00	SQFT		\$	
0560	06600		REMOVE PAVEMENT MARKER TYPE V	35.00	EACH		\$	
0570	08018		RETAINING WALL (POLYPROPYLENE BARRIER WALL)	2,450.00	SQFT		\$	
0580	10020NS		FUEL ADJUSTMENT	7,619.00	DOLL	\$1.00	\$	\$7,619.00
0590	10030NS		ASPHALT ADJUSTMENT	19,137.00	DOLL	\$1.00	\$	\$19,137.00
0600	20748ED		SHOULDER MILLING/TRENCHING	2,442.00	SQYD		\$	
0610	21134ND		REMOVE-STORE AND REINSTALL SIGN	2.00	EACH		\$	
0620	21289ED		LONGITUDINAL EDGE KEY	9,128.00	LF		\$	
0630	21373ND		REMOVE SIGN	105.00	EACH		\$	
0640	24189ER		DURABLE WATERBORNE MARKING-6 IN W	38,157.00	LF		\$	
0650	24190ER		DURABLE WATERBORNE MARKING-6 IN Y	38,157.00	LF		\$	
0660	24631EC		BARCODE SIGN INVENTORY	179.00	EACH		\$	
0670	24894EC		REMOVE BOULDERS (STA 583+14 AND 583+42)	2.00	EACH		\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0680	00462		CULVERT PIPE-18 IN	131.00	LF		\$	
0690	00464		CULVERT PIPE-24 IN	159.00	LF		\$	
0700	00466		CULVERT PIPE-30 IN	75.00	LF		\$	
0710	00472		CULVERT PIPE-60 IN	4.00	LF		\$	
0720	00496		CULVERT PIPE-36 IN EQUIV	78.00	LF		\$	
0730	01204		PIPE CULVERT HEADWALL-18 IN	3.00	EACH		\$	
0740	01208		PIPE CULVERT HEADWALL-24 IN	2.00	EACH		\$	
0750	01213		PIPE CULVERT HEADWALL-36 IN EQUIV	4.00	EACH		\$	
0760	01220		PIPE CULVERT HEADWALL-60 IN	1.00	EACH		\$	
0770	01374		METAL END SECTION TY 1-30 IN	1.00	EACH		\$	
0780	01381		METAL END SECTION TY 2-18 IN	6.00	EACH		\$	
0790	01383		METAL END SECTION TY 2-24 IN	2.00	EACH		\$	
0800	01493		DROP BOX INLET TYPE 2	1.00	EACH		\$	

PROPOSAL BID ITEMS

204117

Page 3 of 3

Report Date 8/28/20

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0810	01642		JUNCTION BOX-18 IN	3.00	EACH		\$	
0820	01643		JUNCTION BOX-24 IN	1.00	EACH		\$	
0830	01726		SAFETY BOX INLET-18 IN SDB-1	1.00	EACH		\$	
0840	01727		SAFETY BOX INLET-24 IN SDB-1	1.00	EACH		\$	
0850	02483		CHANNEL LINING CLASS II	640.00	TON		\$	
0860	02603		FABRIC-GEOTEXTILE CLASS 2	1,237.00	SQYD		\$	
0870	02625		REMOVE HEADWALL	10.00	EACH		\$	
0880	08003		FOUNDATION PREPARATION (STA 856+84)	1.00	LS		\$	
0890	08003		FOUNDATION PREPARATION (STA 869+09)	1.00	LS		\$	
0900	08100		CONCRETE-CLASS A	46.80	CUYD		\$	
0910	08150		STEEL REINFORCEMENT	2,430.00	LB		\$	
0920	20092ES611		PRECAST CONCRETE BOX CULVERT (10'X5')	43.00	LF		\$	
0930	20092ES611		PRECAST CONCRETE BOX CULVERT (4'X3')	6.00	LF		\$	
0940	23044NS710		SAFETY BOX INLET-36 IN SDB-1	2.00	EACH		\$	
0950	24544EC		REMOVE (CULVERT STA 841+79)	30.00	LF		\$	
0960	24575ES610		HEADWALL (SLOPED AND MITERED CONCRETE - 18 IN)	3.00	EACH		\$	
0970	24575ES610		HEADWALL (SLOPED AND MITERED CONCRETE - 30 IN)	1.00	EACH		\$	
0980	24695ED		BOX CULVERT HEADWALL (PRECAST 4'X3')	1.00	EACH		\$	

Section: 0004 - WATERLINE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0990	14024		W MAIN POINT RELOCATE	6.00	EACH		\$	
1000	14059		W PIPE PVC 06 INCH	400.00	LF		\$	
1010	14082		W SERV PE/PLST SHORT SIDE 1 IN	4.00	EACH		\$	
1020	14105		W VALVE 06 INCH	3.00	EACH		\$	

Section: 0005 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1030	02569		DEMOBILIZATION	1.00	LS		\$	